UNITED STATES MARINE CORPS
COMMANDING GENERAL
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MARINE CORPS AIR GROUND COMBAT CENTER
TWENTYNINE PALMS, CALIFORNIA 92278-8100

CCO P8000.4A
21
24 Sep 97

COMBAT CENTER ORDER P8000.4A

From: Commanding General
To: Distribution List

Subj: STANDARD OPERATING PROCEDURES FOR CLASS V MATERIAL (SHORT TITLE: SOP FOR CLASS V MATERIAL)

Ref: (a) CCO 8027.1B
(b) NAVSEA OP 5 Vol.1
(c) CCO 3574.1
(d) NAVCONSTCENPHINST 8023.2D
(e) Chief of Staff ltr 8000:12/03 dtd 28 Apr 94
(f) MCO P8011.4H
(g) UM 4400-15
(h) NAVSEA SWO20-AC-SAF Vol. 010, 020 and 030
(i) ALMAR 151/94 CMC Washington DC 190101Z May 94
(j) SPECINST P8010.12E
(k) MCO P4400.150B
(l) JAGMAN 5800.7B
(m) MCO 8390.3B
(n) MCO 8390.4B
(o) MCO 8020.1F
(p) MCO 3570.1A
(q) MCO 8025.1C
(r) MCO 4340.1
(s) TWO 24-AA-ORD-010
(t) NAVSEA OP 2239 (NOTAL)
(u) NAVSEA OP 2165 Vol. 1 (NOTAL)
(v) I.C.C. Tarriff No. BOE-6000-N
(w) NAVSEA OP 3681
(x) Mil-Std 129(Series)
(y) NAVSEA OP 2173
(z) NAVSEA OP 4098
(aa) CCO 8000.6 NAVSEA OP 4461
(bb) NAVSEA OP 5 Vol. 3
(cc) OPNAVINST 5530.13B
(dd) MCO 4750.24A
(ee) NAVSEAINST 8023.11
(ff) NAVSEA OP 3347

Encl: (1) LOCATOR SHEET

Reports Required: I. Ammunition Expenditure Report (Report Symbol Exempt) Par. 2007.2
II. Class V(W) Ammunition Malfunction Report (Report Symbol DN# 8025.2) Par. 5002.3B

1. Purpose. To promulgate Standard Operating Procedures (SOPs) and policies for the management, control: safe handling, permanent storage, field storage, transportation and demilitarization of ammunition and explosives. Outline

requirements for ammunition accident investigations, malfunctions or mishaps reporting of all Class V material as addressed in references (a) through (ff) aboard Marine Corps Air Ground Combat Center, Twentynine Palms, CA (MCAGCC).

2. Cancellation. CCO 8000.4.

3. Background. The mission of MCAGCC is to conduct live-fire Combined Arms Exercises (CAXs) for Marine Air Ground Task Force (MAGTF) and other major training exercises live-fire and non-live fire, as directed, to evaluate the effectiveness of Fleet Marine Forces (FMF) units and MAGTF's in command, control and coordination of combined arms; to exercise and refine existing doctrine to develop more efficient means to accomplish FMF missions; and to examine the adequacy, currency and adaptability of doctrine applications to cope with ongoing evolutionary changes in FMF tactics. All permanent and temporary storage facilities addressed in this order assist in supporting active and reserve units of the operating forces aboard MCAGCC to include joint and combined training for expeditionary operations.

4. Action. Effective upon receipt, commanding officers, directors and officers in charge will ensure compliance and issue amplifying instructions concerning the Manual as appropriate.

5. Summary of Revision. This Manual contains major and administrative changes and should be read in its entirety.

6. Recommendation. Recommendations concerning the contents of the "SOP For Class V Material" are invited. Such recommendations will be forwarded to the Commanding General, MCAGCC, Director, Installations & Logistics via the chain of command.

7. Applicability. This Manual is applicable to all commands and organizations located and training aboard the Combat Center.

8. Certification. Reviewed and approved this date.

H.C. FLORENCE
Chief of Staff

DISTRIBUTION: A-2 plus Center Magazine Area (50)

Copy to: CG I MEF; CG 1stMarDiv; CG, 2ndMarDiv; CG,MARRESFOR; CG, 1stFSSG; CG, 2dFSSG; CG, 2dMAW; CG, 3dMAW; CO, CSSG-1

LOCATOR SHEET

Subj: STANDARD OPERATING PROCEDURES FOR CLASS V MATERIAL (SHORT TITLE: SOP FOR CLASS V MATERIAL)

Location: _____
(Indicate the locations(s) of copy(ies) of the Manual)

ENCLOSURE (1)

RECORD OF CHANGES

Log completed change action as indicated.

Change Number	Date of Change	Date Entered	Signature of Person Incorporated Change

SOP FOR CLASS V MATERIAL

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SOP FOR CLASS V MATERIAL

CHAPTER 1

GENERAL

CHAPTER 1

GENERAL

1000. GENERAL

1. The Combat Center Magazine Area is located 4.5 miles from the main gate on Del Valle Road. This is a restricted area and only authorized personnel are admitted.

2. The Center Magazine Area (CMA) is a branch within Supply Division, MCAGCC, Twentynine Palms, CA. The CMA is used for the storage of both Class V(W) (ground) and Class V(A) (aviation ordnance) munitions.

3. Responsible Officer. The Officer in Charge of the CMA is the responsible officer for all munitions stored within the CMA and all incoming and outgoing shipments. The OIC will advise the Commanding General of all matters pertaining to munitions aboard the CMA. When applicable the OIC should maintain an interest in the operation of the ground field ammunition supply point (FASP).

4. Aviation Ground Support Element (AGSE). The AGSE Ordnance Safety Officer, Expeditionary Air-Field (EAF) will be the point of contact and cognizant authority for all Aviation ordnance safety matters within the AGSE. The Aviation Ordnance Officer shall direct and coordinate the efforts of all personnel in matters relating to Aviation Ordnance Safety and to matters pertaining to the Aviation Ordnance Safety Program.

5. Explosive Ordnance Disposal Unit (EOD). EOD is under the responsibility of Director, Operations & Training. This unit provides the capability to neutralize hazards from incidents, which, because of unusual circumstances, are beyond the capabilities of other specialties and present a threat to operation, installations, personnel or material. EOD is governed by reference (a).

6. Explosive Safety Officer. The Explosive Safety Officer (ESO) will be designated in writing and will be for the compliance of all matters pertaining to explosive safety aboard the Combat Center. The ESO shall manage the explosive safety program and to provide reasoned, informal advice to the Commanding General regarding compliance with all references addressed in this order. The ESO specifically, shall be responsible for ensuring compliance with reference (b), paragraph 1-4.3.1 and all other references addressed in this order pertaining to personnel involved with explosive operations.

1001. MISSION

1. The CMA is responsible for requisitioning, receipt, storage and the issue of all munitions required for use aboard the Combat Center.

2. In addition, the CMA is responsible for the following specific functions:

a. Safe munitions storage and handling practices by complying with current directives.

b. Accountability and inventory management of all on hand munitions.

c. Internal magazine area working hour security, in coordination with the Combat Center Provost Marshal.

3. Marksmanship Training Unit (MTU). MTU is responsible to provide rifle/pistol range areas for Marines aboard the Combat Center to develop marksmanship proficiency. MTU is responsible for storage, handling, security and accountability for small arms, hazard class/division 1.4, material aboard the Combat Center's rifle

range. Reference (c) governs ammunition and explosives operations at MTU's rifle/pistol ranges.

4. Blasting Quarry. Established by an Inter-Service Support Agreement between the Combat Center and Naval Construction Training Center (NAVSONSTRCEN) Port Hueneme, CA has addressed the area between MTU and BEARMAT (Range Control) areas as the Blasting Quarry. The Blasting Quarry area is used to provide readiness training to Naval Construction Force (NCF) units deployed throughout the world. NAVCONSTRACEN personnel are responsible for the safe storage and handling practices of the type of explosives that are used while aboard the Blasting Quarry, MCAGCC. Operations and other ordnance practices are addressed in their SOP, reference (d).

5. Ammunition Combat Element (ACE). ACE units that are temporarily stationed at the Ammunition Issue Point (AIP), EAF are responsible for requisitioning, receipt, storage and the issue of all Class V(A) munitions required for use during CAX training aboard the Combat Center. In addition, the ACE units providing Aviation Ordnance Operations are responsible for the following specific functions:

a. Safe munitions storage and handling practices by complying with their own SOPs, with current directives and Combat Center orders when applicable.

b. Accountability and inventory management of all on hand munitions.

c. Internal security to patrol AIP area.

6. Combat Service Support Detachment (CSSD). CSSD units that are temporarily stationed at the field ammunition supply point (FASP), Camp Wilson are responsible for requisitioning, receipt, storage and issue of all munitions required for use during CAX training aboard the Combat Center. In addition, the CSSD units providing ground ordnance operations are responsible for the following specific functions:

a. Safe munitions storage and handling practices by complying with their own SOPs, with current directives and Combat Center orders when applicable.

b. Accountability and inventory management of all on hand munitions.

c. Provide FASP internal working hour security in coordination with CO, MAGTF S-4 personnel during Desert Fire Exercise (DESFIREX) and/or CAX operations.

1002. COMMAND RESPONSIBILITIES.

1. The Commanding General, MCAGCC is solely responsible for the safety and protection of personnel and property of this command. It is CG, MCAGCC's responsibility to:

a. Ensure the qualification certification of personnel stationed at MCAGCC who perform or supervise any ordnance and/or explosive operations.

b. Shall have aboard MCAGCC a Safety Department responsible for assuring the understanding of and compliance with all explosive safety criteria addressed in this order.

c. Requiring personnel of Marine Corps commands, other military agencies, federal agencies including contractors while aboard the Combat Center to conduct their activities under the guidelines of this order as well as other Combat Center orders and safety rules.

d. Shall enforce the mandatory requirements established within this order as well as references (a) through (ff) and be guided by their advisory provisions.

e. Shall initiate those directives and inspections that are necessary for compliance with the rules and regulations described within this order. If no safety rule or regulation exists CG, MCAGCC shall exercise necessary action to control the hazard.

2. Commanding officers shall be responsible for maintaining and providing appropriate security, explosive safety standards and procedures for handling of assigned munitions. Commanders shall ensure that only those munitions required for immediate training needs are unpackaged. Investigations shall be requested for munitions which are relegated to an unserviceable condition due to excessive breakout or rough handling.

1003. EXPLOSIVE SAFETY ADVISORY BOARD. The Explosive Safety Advisory Board is established by reference (e). The board provides a standing forum to address those Combat Center unique ordnance operations. The board will specifically address ordnance operations which are not covered by Department of Navy (DON) instructions or Marine Corps Orders and other additional topics as may be necessary. The board will be comprised of representatives from these Directorates and Units having ordnance operations onboard the Combat Center. The Combat Center ESO will act as the board's facilitator. Representatives will meet periodically to discuss issues of concern and make recommendations for resolutions.

SOP FOR CLASS V MATERIAL

CHAPTER 2

PREPOSITION, REQUISITION, ISSUES, TURN-INS, REPORTING AND SECURITY

CHAPTER 2

PREPOSITIONING, REQUISITIONING, ISSUES, TURN INS, REPORTING AND SECURITY

2000. PREPOSITIONING CLASS V(W) (GROUND MUNITIONS ALLOWANCES

1. General. The below paragraphs provide guidance for establishing and computing munitions allowances. It also provides guidance of prepositioning Class V(W) training munitions at the Center Magazine Area (CMA).

2. Training Allowances. The current edition of reference (f) promulgates Class V(W) training allowances for all Marine Corps activities, air and ground units and detachments. It provides general instructions and computation factors for determining amounts and types of Class V(W) material authorized for specific purposes. The current edition of reference (f) is the sole source authority for munitions expenditures during peacetime for Class V(W).

a. In the event commanders determine that Class V(W) training allowances are not sufficient to support unit training requirements, a recommended change to the appropriate allowance factor will be submitted, via the chain of command, using the format contained in appendix B of reference (f).

b. Request for special allowances will be submitted via the chain of command to the Commanding General, Marine Corps Combat Development Command (MCCDC Code C465RA2), Quantico, Virginia with a copy to Marine Corps Systems Command (MARCORSYSCOM, Code AM) in the format contained in appendix C of reference (f).

3. Computing the Allowance. The munitions allowance is based on the units anticipated strength, table of equipment (T/E), available supply rates (ASR's), and the allowance factors contained in reference (f). It is recommended that unit commanders review past Class V(W) requirements and submit current fiscal year allowances to MCCDC when those requirements are less than the authorized quantities reflected in reference (f). Combined Arms Exercises (CAX) requirements will NOT be included in any units training allocation but will be planned for and provided to the customer by the CMA.

4. Local Procurement. MARCORSYSCOM (AM) is the only activity authorized to order munitions for the single item manager. Unit requisitions of munitions ARE NOT AUTHORIZED without prior approval of MARCORSYSCOM (AM).

2001. STATEMENTS OF ANNUAL REQUIREMENTS

1. In order to ensure that the CMA has sufficient munitions on hand to support all activities conducting training aboard the Combat Center, each activity must provide the CMA with a Statement of Annual Requirements. The following additional information applies:

a. The Statement of Annual Requirements will be submitted 90 days prior to the commencement of each fiscal year. It will list the annual requirements broken down by quarter, as outlined in paragraph 09005 of reference (g).

b. Quarterly requirements should project realistic training during any given quarter rather than simply dividing the annual allowance by four quarters.

2. Unit commanders should review the Statement of Annual Requirements each quarter to ensure that sufficient munitions will be available to support changes in the unit's training schedule. Changes to the Statement of Annual Requirements must be received by the CMA prior to commencement of each quarter. Units are reminded that due to limited storage space, stockage levels are based on information derived from the projected quarterly requirements. Units which do not plan and project their needs may not have munitions available for issue.

3. Nonexpenditure of allocated munitions during a given quarter will not ensure that an equivalent quantity of assets will be on hand during the subsequent quarter. Allowances are not automatically rolled over to the next quarter unless the activity requests a Marine Ammunition Requirements Support Order (MARSO) change (e.g., first quarter to third quarter and second quarter to fourth quarter).

4. CAX munitions will not be identified in the unit's Statement of Annual Requirements. Munitions requirements which are over and above the CAX allocation will be included in the Statement of Annual Requirements.

5. Requalification Allowances. Annual Class V(W) training allowances do not reflect annual requalification allowances. The allowances are under the direct control of the Commanding General, MCAGCC and will be identified in the Combat Center Marksmanship Training Unit's Statement of Annual Requirements.

2002. REQUISITIONING CLASS V(W)

1. Requisition Submission. Units desiring to draw munitions against their established allowance will submit requisitions to the CMA (MTQ) Records Office in building 2211T1, via the appropriate chain of command using one of following manners:

a. The preferred manner is to input the requisitions directly into the AMMOLOG's II system.

(1) Access to this system must be requested in writing by the unit Terminal Area Security Officer (TASO), via the chain of command to the Officer in Charge, Center Magazine, Box 799109, MCAGCC, Twentynine Palms, California 92278-9109.

(2) The request must include the individual's name, rank, SSN, user identification and the type of access requested, along with justification to obtain access to AMMOLOGS.

b. Providing a MILSTRIP requisition message to CG MCAGCC TWENTYNINE PALMS CA//SUP//CMA//.

c. Submission of a DD Form 1348 (6 part) hard card (fig. 2-1). A signature of the person authorized to requisition Class V must be included on back of the 1348 (first page).

2. Pick Up Date. Requisitions will be submitted a minimum of five working days in advance of the desired pick up date.

3. Project Codes. The following "LOCAL" requisition project codes will be utilized aboard the Combat Center:

AIR - Prepare and certify for air shipment.
SEA - Prepare and embark aboard ship.
PRE - Prestage on RDD for pickup the following date.
WPS - Prestage on RDD for pickup over a weekend.
OFF - Prepare for off base shipment.
YTP - Clear for overhead fire / same as "PRE".
YTW - Clear for overhead fire / same as "WPS".
YTA - Clear for overhead fire / same as "AIR".
YTS - Clear for overhead fire / same as "SEA".
YTO - Clear for overhead fire / same as "OFF".
YTT - Clear for overhead fire.
YSS - Training.
YST - Maritime prepositioning.
508 - In support of JTF-6 missions.

Any additional project code that will better meet the needs of the customer may be requested from the OIC, CMA. Units tasked by higher headquarters to conduct special exercise test of demonstrations requiring the use of Class V(W) will ensure that the requisitions are appropriately annotated.

2003. PREPOSITIONING AND REQUISITIONING CLASS V(A) (AVIATION ORDNANCE)

1. General. The CMA is not a permanent storage point for aviation ordnance. Ordnance availability is limited to the temporary storage requirements for specific training evolutions.

2. Requirements. Class V(A) ordnance will be submitted to the CMA by the Sir Combat Element (ACE) for each exercise. Due to limited storage space, ordnance will not be force fed into the CMA without prior approval of the OIC. Detail requirements include:

a. Requests will be submitted 90 days prior to the required delivery date.

b. All items requested under the 90 day lead time are subjected to cancellation at the discretion of the OIC, CMA.

c. Requests will be submitted to the CMA in MILSTRIP format. Plain language requests will be rejected. The CMA will use suitable substitutes unless an appropriate advice code is assigned.

d. The CMA will provide a biweekly supply status to the requester on all processed requirements.

2004. ADDITIONAL CLASS V(W)/(A) REQUIREMENTS

1. Requisition Cancellation. In the event requisitions are to be canceled, the CMA will be notified by telephone as soon as possible. A MILSTRIP cancellation message or a 6 part DD Form 1348 will be expeditiously submitted to the CMA. It will have the same information as the original document except the document identifier code (DIC) will contain "AC1".

a. In order to continue a requisition beyond the pickup date specified, a DIC (AM1) transaction with the revised date will be submitted to the CMA at least 24 hours prior to the original pickup date.

b. Any requisitions not picked up within 24 hours past the original required delivery date will be canceled and the munitions will be returned to stock. Required delivery dates may be changed by a DIC (AM!) transaction.

2. Vehicle Support.

a. If a unit does not have sufficient motor transport assets to transport the total quantity of munitions required for training on any given day, separate requisitions must be prepared for each day munitions are to be picked up. Activities withdrawing munitions must be familiar with the contents of reference (h) to ensure load compatibility.

b. Requisitioning units are responsible for providing the transportation, working parties and security personnel required for the movement of munitions to or from the CMA. Personnel, equipment and munitions will not be transported in the cargo space of the same vehicle.

3. Customer Support Working Hours. Normal working hours at the CMA are from 0700 to 1600 Monday through Friday with the exception of Thursday afternoon. Thursday afternoon is a designated training time for CMA personnel. Munitions required for pickup on Thursday afternoons must be prestaged by the unit or approved for pickup by the OIC, CMA.

4. Priority Requisitions. Walk-through requisitions may be submitted only when absolutely necessary. Walk-through requisitions will be submitted with complete justification either on the back of the DD Form 1348-1 or on a separate memorandum for requisitions submitted through AMMOLOG's. Walk-through justification will be signed by the unit's commanding officer. The CMA will process walk-through requisitions within six working hours of receipt.

2005. MUNITIONS PICKUP - CLASS V(W)/(A)

1. Pickup of Munitions. Unit commanders are responsible for ensuring the ammunition drivers are properly trained and the DD Form 626, inspection of vehicles, is performed prior to reporting to the CMA to receive munitions. To preclude unnecessary delays caused by vehicle failing inspection and being turned away, ensure the following basic requirements are met prior to arrival at the CMA:

a. A Letter of Authorization (fig. 2-2) must be on file at the CMA specifying the personnel authorized to requisition and/or receipt for munitions. The letter must have original signatures and must also designate who is authorized to request and sign for Security Risk Category (SRC) 1 and 2 munitions. Reproduced copies will not be accepted. The same person is not authorized to requisition and receive the same munitions.

b. SRC 1 items require an armed guard and either an officer of SNCO to sign for the munitions. The officer or SNCO may act as the armed guard. An armed guard is also required to receive SRC 2 munitions. The individual who signs for the high risk item must remain with that munitions until it is either:

(1) Expended.

(2) Turned back in to the CMA.

(3) Receipt for by another officer or SNCO authorized to sign for the munitions.

c. A vehicle load plan should be complete before arriving at the CMA. The CMA will fill each requisition one at a time. At no time will partial documents be filled to allow different units to pick up under one requisition, i.e. one requisition for several artillery batteries. Plan your loads and requisitions accordingly to prevent delays.

d. Appropriate placards will be mounted on each vehicle transporting munitions. Changing placards from class "A" to "b" explosives and vice versa with tape and magic markers is not authorized (see paragraph 3004.3 below).

e. Have a completed vehicle inspection form (DD Form 626).

f. Ensure vehicle and driver qualifications are met as outlined in reference (c).

g. All personnel withdrawing munitions will check in with the Records Chief, located in building 2211T1, upon arrival at the CMA.

2. Personnel. Units will furnish either a qualified Ammunition Technician (MOS 2311), Aviation Ordnance Handler (MOS 6521), an officer or SNCO to pick up munitions. Explosive Ordnance Disposal (EOD) Technicians (MOS 2236) are authorized to pick up munitions for the Base EOD Team and the Aviation Ground Support Element EOD Team.

3. Prestage. Munitions required for use prior to normal working hours or on weekends will be loaded the previous day and staged within the CMA. SRC 1 and 2 munitions will not be prestaged at any time. Munitions will not be

prestaged over 24 hours unless arrangements have been made with the OIC, CMA. Under no circumstances will munitions be transported to or staged within the main camp area. All munitions that are to be prestaged must be palletized and banded (to include light cans) to prevent pilferage. In addition, prestaged vehicles will be chocked, tarped, and a fire extinguisher will be placed in front of the vehicle.

4. Combined Arms Exercise (CAX) Pickup. CAX munitions will only be issued to the ACE ordnance detachment for Class V(A) and the Combat Service Support Detachment (CSSD) for Class V(W).

a. Units participating in the CAX will requisition their requirements from the ACE or CSSD. Participating units who submit requisitions to the CMA will be refereed back to the appropriate Field Ammunition Supply Point (FASP).

b. Close coordination with the CMA is recommended prior to scheduled pickup to determine dates, times, vehicle availability and to identify any problem areas that may delay the issue.

2006. MUNITIONS TURN IN - CLASS V(W) / (A)

1. Prestaged Turn In. Munitions to be turned in to the CMA will be accepted for fast off-load as stated in paragraph 2004.3. In the event it is not feasible to return munitions to the CMA during normal working hours, the vehicle will be prestaged until the next work day. All munitions must be secured (strapped or banded) to prevent pilferage. All vehicles must have the wheels chocked, load tarped, and a fire extinguisher placed in front of the vehicle. Units are responsible for providing guards for prestaged turn ins which contain SRC 1 and 2 munitions. If a vehicle must be off-loaded after 1500, liaison must be made with the OIC, CMA for special arrangements.

2. Personnel Requirements. An officer, SNCO, Aviation Ordnance Handler, Ammunition Technician, or EOD technician must accompany munitions being turned in to the CMA.

3. Transportation Munitions. Unit commanders are responsible for the proper loading of vehicles, compatibility and transportation procedures. Munitions will be segregated and placed in the original packing container for protection during transportation. Commanders will ensure that the explosive safety regulations contained in reference (c) are strictly enforced when transporting munitions both on and off the Combat Center.

4. Reason for Turn In. Munitions may be returned to the CMA for the following reasons:

a. When items are no longer required.

b. As directed by higher authority.

c. Remaining assets within a lot number, in the case of a malfunction.

d. When an item has been reclassified to an unserviceable or suspended condition code due to a Naval Ammunition Reclassification message or local reclassification.

5. Credit to Annual Allowance. Using units will receive credit for unexpended munitions when it is turned in to the CMA in a serviceable condition code.

6. Turn In Procedures. The following turn in procedures apply:

a. Containers containing munitions will be identified by DOD Identification Code (DODIC)/Naval Ammunition Logistics Code (NALC), national stock number (NSN), lot number, condition code and quantity.

b. If the factory seal on the containers has been broken, a munitions certificate slip (Form 29P-8020 10-79) verifying that the round is complete and serviceable for use must be filled out and signed by an officer and inserted into the container.

c. Munitions of different DODICs/NALC's and lot numbers will not be placed in the same containers.

d. All fuses shall be returned to the original safe setting.

e. All empty containers will have hazardous markings obliterated and marked empty per reference (b).

*****NOTE*****

As specified in reference (i) empty containers that are subjected for turn-into DRMO will be marked by affixing a weather resistant placard or tag to stenciled with the word "empty" in approximately one inch letters. Palletized containers will be marked with "empty" on one side of the pallet. Each ammunition container that is not palletized shall be individually placarded, tagged or stenciled with the word "empty".

f. Repairable items that are unserviceable due to being incomplete (i.e., rocket launchers without safety pins), will be identified on the turn in document.

g. Cartridge actuated devices (CADS), with a shelf life will be marked on the outside of the container with the date opened, exact quantity and expiration date. CADs will be turned in as condition code "Charlie" (CC-C), priority issue. Those CADs which are opened and have reached their shelf life will be considered to be condition code "Hotel" (CC-H) and disposed of by authorized personnel.

h. Per references (b) and (j), user s are required to inspect returned munitions for serviceability. Munitions found to be unserviceable will be identified by a separate DD Form 1348-1 turn in document and condition code "Hotel" (CC-H). If items have been relegated to an unserviceable condition due to improper handling or transportation, the CMA will request a formal investigation be initiated by the responsible activity i.e., I MEF, II MEF. The investigation will be conducted per references (k) and (l). A copy of the request will be forwarded to the Commanding General, MARCORSYSCOM (Code AM). Munitions that are under investigation will be retained by the CMA in an "as is" condition with the exception of munitions that are considered suspect or hazardous, pending completion of the investigation.

i. The using activity is responsible for providing a DD From 1348 for all returned and retrograded munitions and aviation ordnance containers. The DD Form 1348-1 will be completed as prescribed by reference (g). Using units will leave blocks P (material condition code) and Q (quantity) blank. The CMA will fill in these blocks after an inspection of the item is conducted.

j. Returned munitions will be inspected for condition, lot number, quantity and compatibility. Copies 1, 4, 5 and 6 of DD Form 1348-1 will be returned to the customer.

2007. MUNITIONS REPORTING - CLASS V(W) / (A)

1. Unit Reporting. All units will submit expenditure reports via their chain of command to the appropriate G-4 within 48 hours after completion of exercise. TEECG will submit CAX expenditure reports to MCCDC (Code C465RA2) Quantico, Virginia.

2. CAX Reporting. Units receiving Class V(W) munitions from the CMA to support the pre-CAX and CAX package, as outlined in reference (f), will submit an expenditure

report to TEECG within 48 hours after completion of the exercise. This report will be broken down into two separate categories.

a. Pre-CAX - This will list the pre-CAX munitions requirements and the munitions expended against this requirement.

b. CAX - This will cite the CAX munitions requirements and the amount of munitions expended against this requirement.

3. Format. Each report will consist of DODIC, quantity received, quantity expended, quantity turned in serviceable and quantity turned in unserviceable.

4. Class V(A). The report for Class V(A) will be accomplished via Ammunition Transaction Reports (ATRs).

5. TOW and Dragon Missile Firing Reports. A report of all TOW and Dragon missile firings, or attempted firings will be submitted within ten days. The current editions of references (m) and (n) provide specific reporting instructions on report submissions.

6. Serialized Item Reporting for Class V(W). Expenditure reports for Stingers, TOWs, Dragons, HAWKs, AT4 and SMAW rockets will be submitted within 72 hours to MARCORSYSCOM WASHINGTON DC//AM// via priority message with information copies to WPNSTA SEAL BEACH FALLBROOK ANNEX//5133//, NAVSURFWARCENDIV CRANE IN //503//, the user's appropriate chain of command and the issuing ammunition supply point. If discrepancies are noted by the supporting ASP, the requisitioner will be notified of the disparity. If the disparity is not corrected within five working days, the supporting ASP will notify MARCORSYSCOM.

2008. SECURITY MEASURES CONCERNING MUNITIONS

1. Responsibility. Unit commanders are responsible for the security and control of assigned munitions. Commanders are responsible for ensuring that only authorized personnel receipt for munitions drawn from the CMA and FASP. Unit commanders will designate, in writing, the personnel authorized to sign requisitions and to receipt for munitions to each supporting ASP/FASP. Paragraph 2005.2 above specifies the personnel who shall be authorized to draw munitions from the CMA. Individuals authorized to requisition munitions will not be authorized to sign for those same munitions. Authorization and sample signature letters should be submitted as an enclosure to the unit's Statement of Annual Requirements. The authorization letter will be updated whenever there is a change of commanding officer or designated personnel. Figure 2-2 provides a sample authorization letter. Updated letters of authorization will void all previous letters.

2. Control. Proper supervision and control will be maintained for all munitions in the customer's possession. By virtue of the nature of munitions, stringent security procedures, accountability and control must be maintained to ensure that every round is utilized for its intended purpose and not discarded or pilfered. Munitions not expended upon termination of the exercise will be returned to the appropriate storage activity. The following control measures will be taken:

a. Supervisory personnel will be present when the vehicl/convoy is picking up or returning munitions from or to the CMA.

b. The detail or range OIC will assume responsibility for all munitions upon arrival at the training site. The range OIC will inventory all munitions and verify those amounts against the DD Form 1348-1 issue document and will receipt for the same. The above inventory will not be delegated down to the unit ammunition technician. The range OIC will:

(1) Ensure the munitions are controlled and issued to the users.

(2) Ensure that the munitions are not removed from the packing containers until required for firing as outlined in references (o) and (p).

(3) Ensure that all supervisory personnel have in their possession a NAVMC 10155 card (Ammunition Malfunction Data Collection Guide) as required by reference (q).

c. Upon completion of the exercise, range OIC will ensure that all unexpended munitions are inventoried, verified and receipt for by the appropriate storage activity. It is extremely important that the ending inventory quantity be verified against what is actually turned in to the storage activity to prevent the pilferage of unused training munitions. The range OIC will sign the turn in document (DD Form 1348-1) to verify the type, lot number and quantity of the munitions. Once signed, there will not be any changes to the quantity field. If additional munitions are turned in, a new DD From 1348-1 will be made for the new quantity. Quantity changes will be scrutinized very closely by the CMA as this may indicate a compromise in munitions control. Control measures include:

(1) If any items are determined to be missing, the using unit will submit a Missing, Lost, Stolen, or Recovered (MLSR) report per reference (r), via the chain of command.

(2) Unit commanders will establish procedures which ensure timely recovery of all line ordnance and salvageable munitions components (brass, links, etc.).

(3) Munitions requested shall be limited to on hand quantities necessary to support known requirements. This quantity must not exceed that which can be safeguarded.

(4) Unserviceable munitions will be afforded the same degree of security and control that is afforded to other categories of munitions.

(5) Munitions will not be removed from the confines of the Combat Center, except as duly authorized by proper authority.

(6) Munitions will not be provided gratuitously, offered for sale, sold or exchanged for government or privately owned property.

(7) Munitions will never be abandoned, destroyed, fire indiscriminately or otherwise disposed of in order to circumvent the inconvenience of returning it to a storage site.

(8) Ammunition will not be locally procured without prior approval from MARCORSYSCOM (AM).

(9) Ammunition shall not be disassembled, altered or modified except for those normal operations provided for in user level technical publications (e.g., fusing projectiles) and authorized operations performed by qualified EOD personnel.

(10) Commanders will ensure that all cognizant personnel have a thorough understanding of issue and turn in procedures. Also, ensure that all personnel know that munitions are considered hazardous and shall be handled accordingly.

(11) Munitions will be expended for the intended training purposes only.

d. Munitions which have been stolen, recovered or any other unlawful possession, will be reported to the Provost Marshall Officer and the Naval Investigation Service (NIS). Before relinquishing control of recovered munitions, a chain of custody must be established covering the time the munitions are recovered up to the time the munitions are turned in to the CMA. The munitions will remain in storage for 90 days or until the investigation has been completed.

3. Armed guards. An armed guard, in addition to the driver is required to accompany any explosive laden vehicles containing SRC 1 and 2 munitions departing from or returning to the CMA. Ammunition vehicles traveling in convoy require only one guard. If there is only one armed guard, the guard will ride in the chase vehicle.

4. Security of the Center Magazine Area. Security is provided by the Provost Marshal Office during nonworking hours. During working hours, CMA personnel maintain security of the magazine are as directed by the CMA SOPs.

2009. NOTICE OF AMMUNITION RECLASSIFICATION

1. Notices of Ammunition Reclassification (NARs) are generated by the Naval Ordnance Center in Indian Head, Maryland, for rapid dissemination of changes of ammunition condition codes. Each NAR is sequentially numbered by calendar year, e.g., NAR 1-94, 2-94. Units which maintain security munitions or training munitions are required to maintain a NAR file. The following guidance is provided:

a. Upon receipt of a NAR, the lot numbers of all munitions will be checked against the lots cited in the NAR. If the lot number that is maintained by the unit is affected by a NAR , a positive response message report will be initiated by the activity as directed by reference (s).

b. If a NAR places security and/or training assets in an unserviceable condition code, the munitions will be returned to the issuing activity for a one-for-one trade for serviceable stocks.

c. NARs will be maintained and filed in NAR number sequence by calendar year. These files will be kept until they are incorporated into the latest edition of reference (s).

d. CMA personnel will be guided by NAR guidance provided by the various CMA SOPs.

2010. AUTHORIZED QUANTITIES OF MUNITIONS STORED BY UNITS

1. Permanent storage of munitions in any facility other than the CMA is prohibited except as authorized by the current edition of reference (o). Reference (o) authorizes commanders to store limited quantities of security and reaction force munitions to support that unit's requirements in the armory. These munitions will be accounted for on NAVMC 10774 cards as specified in reference (g).

2. The Officer in Charge, Marksmanship Training Unit (MTU) is authorized to store munitions in support of annual requalification requirements. The munitions will be maintained in the ready service lockers located at the Rifle Range. MTU personnel will be guided in their duties by reference (b).

UNITED STATES MARINECORPS
Headquarters Battalion
Marine Corps Air Ground Combat Center
Twentynine Palms, California 92278-8100

4400
XXXXXX
DATE

From: Commanding Officer
To: Officer-in-Charge, Center Magazine Area, Marine Corps Air Ground Combat Center, Twentynine Palms, California

Subj: AUTHORIZATIONS FOR REQUISTION AND RECEIPT OF AMMUNITION

Ref: (a) UM 4400-15

1. The below listed individuals are authorized to requistion ammunition.

NAME	RANK	SSN	SIGNATURE
Hard, I. M.	Maj	987 65 4321	_____

2. Per the reference, the below personnel are authorized to recipt for and turn-in ammunition.

NAME	RANK	SSN	SIGNATURE
Marine, I. R.	Ssgt	123 56 4789	_____
Smith, J. J.	Cpl	987 45 6123	_____

3. This letter supersedes all others.

I. M. COMMAND

FIGURE 2-1.--SAMPLE AUTHORIZATION LETTER

SOP FOR CLASS V MATERIAL

CHAPTER 3

TRANSPORTATION OF MUNITIONS

FIGURE

CHAPTER 3

TRANSPORTATION OF MUNITIONS

3000. TRANSPORTATION OF MUNITIONS BY MOTOR VEHICLE

1. All in-coming, out-going, on-station or off-station transportation of ammunition and explosives aboard MCAGCC is accomplished by motor vehicle. Civilian and military personnel engaged in the handling and transportation of munitions will comply with the instructions contained in references (b), (o), (t), (u), (v) and (w).

2. Military motor vehicles transporting munitions on or off the confines of the Combat Center shall be driven by operators who have satisfactorily completed a 12 hour transportation of munitions course. Upon satisfactory completion of the course, an appropriate entry shall be made on the Standard Military Driver's License (SF-26). At a minimum, explosive drivers will be required to attend refresher training every 12 months. References (t) and (u) shall be used as guides in preparing this course. Explosive drivers must have a valid explosive driver's physical certificate in their possession. The explosive driver's certificate is valid for two years.

3. Military and DOD civilian personnel that transport munitions on or off the Combat Center shall have reference (t) in their possession.

3001. UNIT TRANSPORTATION RESPONSIBILITIES. In addition to the requirements stated in paragraph 3000 above, using units are responsible for:

1. Providing transportation and armed security as appropriate for all munitions transported from or to the CMA or other ammunition supply points and from training areas.

2. Requesting and providing for the return of unexpended munitions to the CMA. Brass, links, empty containers and salvageable components will be returned to the Defense Reutilization and Marketing Office (DRMO) in accordance with local SOP and orders. From time to time, the CMA may require units to return packaging materials to the CMA. In these cases, the packaging materials will be certified inert and marked in accordance with paragraph 11-5.5 of reference (b).

3. Ensuring that all vehicular security and safety requirements are satisfied.

4. Providing working parties as required by the CMA to assist in the issue and turn in of munitions.

5. Providing all material to secure the load, (i.e., tie downs) and the appropriate placards and safety equipment. These items will not be provided by the CMA.

6. Preparing all documentation (DD Form 1348-1s) for the turn in of munitions.

7. Providing wooden dunnaging for the vehicles which have ferrous metal beds.

3002. AUTHORIZED VEHICLES. All tactical cargo type vehicles are accepted to transport munitions. Vehicular exceptions and limitations include:

1. With the exception of the K-4A, M105 and M127 trailers, the transportation of explosives is not permitted in tactical vehicle cargo trailers. Off-station movement of munitions will not be permitted in any trailer, except the M127 (with its sides in place).

2. The High Mobility Multi-wheeled Vehicle (HMMWV) 998 series truck is authorized to transport munitions except when in the four passenger cab configuration. When

utilizing the HMMWV to transport munitions, any stacks exceeding the height of the forward bulkhead must be palletizing and tied down.

3. The K-4A trailer may be used to transport munitions between the CMA and Arming and Issue Point (AIP) and the AIP and the flight line. The following guidance is provided:

a. No more than two trailers may be towed by a prime mover at a time.

b. A "SHOTGUN" (observer) must be posted in the back of the prime mover to observe the trailer during movement.

c. Prime movers towing loaded K-4A trailers are restricted to a speed limit of 35 miles per hour. MCAGCC and Division Road Masters will enforce the speed limit.

d. All loads will be securely strapped down and when possible, dogged down.

e. Side and end gates must be used unless the ordnance is secured in an adapter and locked to the trailer bed.

3003. UNAUTHORIZED VEHICLES. Munitions will not be transported by the following types of vehicles:

1. Privately owned vehicles.

2. Passenger vehicles (sedans, buses or vans).

3. Special purpose vehicles (radio, shop, generator, tankers, dump trucks, etc.).

4. Vehicles carrying high frequency electrical transmitting equipment.

5. The HMMWV, when in the four passenger cab configuration.

3004. VEHICLE REGULATIONS AND REQUIREMENTS

1. All vehicles which will be used to transport munitions will be required to undergo a vehicle inspection at the unit's motor pool. This inspection will be completed prior to arriving at the CMA. This inspection, per reference (w), will utilize DD Form 626, Motor Vehicle Inspection (Transporting Hazardous Materials) figure 3-1. Unit ammunition technicians and aviation ordnance handlers are not authorized to sign the DD Form 626 certifying that a vehicle is safe for transporting munitions. This certification will be accomplished by the unit's Motor Transportation Officer or designated representative.

2. Vehicles used for the transportation of munitions will be clean and have all dunnage (if required) in place prior to reporting to the CMA. Organizational property such as gas cans, water cans, tents and individual equipment will not be carried in the cargo space while transporting munitions.

3. The vehicular requirements contained in references (t), (o) and (w) will be observed and followed.

4. Explosive Hazard Placards

a. All motor vehicles transporting munitions will display the appropriate explosive placards. DOT Class "C" munitions with a gross weight of over 1000 pounds will be placard with a "DANGEROUS" placard. The customer is required to provide the necessary placards.

b. Placards will be the United Nations diamond shaped placards. Locally produced and modified placards are not authorized. National Stock Numbers (NSNs) for placards may be obtained from reference (t).

c. The State of California prohibits the use of reflective materials on the front of motor vehicles. As such, non-reflective placards will be used on the front of motor vehicles transporting munitions off station. Placards will be displayed on all four sides of vehicles transporting munitions. Placards will not be displayed on empty vehicles.

d. When a vehicle contains more than one type hazard (i.e., explosive "A" and "B"), the vehicle will display the placard for the greater hazard (explosive "A").

4. Each vehicle transporting munitions shall be equipped with one 10 pound purple "K" powder or one 15 pound CO2 type fire extinguisher per reference (t).

3005. PERSONNEL REQUIREMENTS FOR TRANSPORTING MUNITIONS

1. Supervisory personnel must be knowledgeable of the following:

a. The specific hazards of the material they are transporting.

b. Designated transportation routes.

c. Steps to be taken in the event of fire or accident.

d. The requirement to remain with the vehicle until the cargo has reached the final destination and has been received by an authorized person.

2. All motor vehicle operators that transport ammunition and explosives on or off the Combat Center as well as public highways will be examined and qualified IAW references (t), (u) and (v).

3. In addition to the requirements stated in paragraph 3000 above, military and civilian drivers are responsible for and shall meet the following requirements:

a. Military drivers must be 21 years of age or older to transport munitions over public highways (off-station). Personnel 18 years or older may qualify to transport munitions on-station providing personnel of proper age are not available. Such personnel must be of demonstrated maturity and dependability. Personnel who have demonstrated alcohol abuse or drug abuse (within one year) will not be authorized to transport munitions.

b. The following forms will be in the custody of the explosive driver for each vehicle transporting munitions:

(1) NAVMC 10627 (SD) 1265, Vehicle and Equipment Operation Record (figure 3-2).

(2) SF-91, Operators Report of Motor Vehicle Accident (figure 3-3).

(3) SF-46 and/or OP 346, Motor Vehicle Operator's Identification Card with the "Explosive Driver" stamped or typed thereon and signed by proper authority per references (t) and (w) (figures 3-4 and 3-5).

(4) DD Form 626, Motor Vehicle Inspection Report (figure 3-1).

(5) A current medical certificate signed by authorized personnel (figure 3-6). This certificate is good for two years for civilian personnel and for military personnel this certificate is good for five years.

(6) DD Form 836, Special Instructions of Motor Vehicle Drivers (figure 3-7), for the transportation of munitions off-station. This form shall be annotated to identify the type of hazard associated with the ammunition and/or explosive

cargo in the vehicle. The required safe distances in case of fire for the fire department and public are located in tables C-1 and C-2 of Appendix C of reference (w).

c. Drivers must have a valid state operator's license (any state). Civilians that operate commercial vehicles must have the driver's license with commercial drivers license (CDL) endorsements of placard vehicles and applicable type and class of vehicle to be operated.

d. Drivers must have considerable and varied experience with the type of vehicle that they are operating.

e. Drivers must be able to read, write and understand English.

f. All drivers and assistant drivers must have a security clearance commensurate with the security classification of the munitions being transported.

4. Explosive drivers shall comply with all traffic regulations, signs and signals. They shall be responsible for the safe operation of their assigned vehicle as well as for their passengers and lading.

3006. MOTOR VEHICLE INSPECTION. Motor vehicles loaded with or to be used for the transportation of ammunition and explosives shall be inspected IAW the requirements of reference (w), documents referenced herein and the appropriate CMA SOPs.

1. When an empty motor vehicle arrives at the CMA for the purpose of being loaded with ammunition and/or explosives the designated shipping inspector(s) shall be responsible for checking the motor vehicle IAW reference (w) for the following:

a. Suitability of the cargo space.

b. Suitability of the driver and proper ownership or leasing of the motor vehicle.

c. Evidence of theft, sabotage or tampering with the motor vehicle.

2. After the motor vehicle has been loaded with ammunition and/or explosives the shipping inspector shall be responsible for the following:

a. Correct marking and labeling of the packages and containers. Detailed instructions for inspecting, marking and labeling of packages and containers for motor vehicle shipments are contained in references (u) and (x).

b. Compatibility and correct arrangement of mixed loads. Table 2-8 of reference (h) contains the compatibility chart that will be used when transporting munitions on and off-station. Compatibility groups may be obtained in Chapter 3 of reference (h). The compatibility charts contained in references (t) and (w) shall not be used since they are no longer valid.

c. Correct Blocking and Bracing. Standard procedures for loading and bracing of ammunition and/or explosives in conveyances shall be used. The requirement of military standards (Mil-Std-1320) (WR-51) and MIL-HNDBK-236T (Navy) which prescribe truck loading procedures shall be observed.

3007. VEHICULAR AND DRIVER SAFETY

1. In addition to the explosive driving regulations contained in reference (t), the following regulations will be followed:

a. Before any munitions are loaded or unloaded:

(1) The engine must be "OFF".

(2) Wheels must be chocked.

(3) All multi-fuel vehicles must have the transmission set in neutral.

(4) The parking brake must be set.

b. No leaking or damaged munitions containers will be accepted for transportation.

c. Munitions that are not properly packaged will not be transported until they are repackaged in a suitable container. Separate projectiles that are not banded on a pallet may be transported providing the rounds are placed on dunnage and secure to prevent movement.

d. Explosive laden vehicles will not enter inhabited areas, park in public parking lots or stand overnight in exercise vehicle handling areas. Vehicles which are parked in authorized holding areas (external to CMA) will have proper security provided by the unit. Explosive laden vehicles are not permitted in the main camp area except when being transported on or off base by the military police. "Main Camp" is defined as the area south of Rifle Range Road. When entering or exiting the Combat Center through the main camp area, vehicles are not permitted off of Del Valle Road. The exception to this rule is when munitions are required for security purposes and are held in authorized areas as indicated in paragraph 2010 above.

e. The loaded gross weight of munitions will not exceed the rated load capacity of that vehicle. Consideration will be given to read conditions when determining vehicle loads. Off- road weight is 100% of rated capacity. Off-road is considered to be all roads which are not asphalt or concrete.

3. The danger of fire is inherent in every motor vehicle loaded with munitions. Drivers transporting munitions will be made aware of the following hazards:

a. Should a fire break out on an explosive laden vehicle, the driver will stop the vehicle as far from the road and inhabited building as possible.

b. If any part of the truck except the actual cargo catches fire, the driver should immediately attempt to extinguish the fire by using a fire extinguisher. Every effort should be made to prevent the fire from reaching the cargo of the vehicle. If the cargo does catch fire, the driver should not attempt to fight the fire unless he is reasonably certain that it is burning only on the outside of the containers and has not reached the rounds themselves.

c. If the contents of the containers are on fire (or if the fire in any part of the vehicle cannot be controlled with the equipment at hand), the driver will:

(1) Notify the Provost Marshall and Fire Department by the fastest means available and, upon arrival or the police and Fire Department, furnish specific information as to type and quantity of munitions loaded on the vehicle.

(2) Give public warnings, by the fastest means available, to keep personnel at least a half mile from the fire at all times.

d. Explosive laden vehicles should not be driven past fires burning on or near the highway until the driver has determined that such passing can be made safely and without stopping.

3008. IMPROPER TRANSPORTATION. When the CMA has determined that returned and/or in-coming shipments have been rendered unserviceable and/or have questionable serviceability due to improper handling and/or transportation shall be addressed in the following manner:

1. If the unserviceable munitions are rendered unserviceable by military personnel a request for investigation will be forwarded via the chain of command to the commanding officer of the customer's unit. A copy of this request will be submitted to MARCORSYSCOM (Code AM). Sound judgment will be used in determining the need for investigation. Investigations will not be requested for normal wear and tear.

2. Standard Form (SF)-361, Transportation Discrepancy Report (TDR) (figure 3-8), shall be used for reporting over, short, astray, loss of or damage to munitions shipments; improper loading or blocking and bracing of the load; improper handling by the carrier; improper placarding and other transportation discrepancies. Distribution of the TDR shall be IAW the instructions detailed in NAVSUPINST 4610.33 (Series).

3. Standard From (SF)-364, Report of Discrepancy (ROD) (figure 3-9), shall be used for reporting preservation, packaging, packing and marking deficiencies noted in shipments of munitions. Packaging deficiencies that result in damage material that are considered to endanger life, impact combat or development operations or affect other material shall be reported immediately to the shipping activity by most expeditious means. In all instances involving packaging deficiencies in munitions shipments, one copy of the SF-364 shall be forwarded to Commander, Naval Sea Systems Command (SEA-06T1), Washington, DC 20362. If the deficiencies are in violation of DOT regulations, one copy of SF-364 shall be sent to Office of Hazardous Materials Transportation, U.S. Department of Transportation, Washington, DC 20590.

FORMAT TO REQUEST FOR OFF BASE SHIPMENT OF CLASS V MATERIAL

(Heading)

8000
(Code)
(Date)

From: Commanding Officer , (Unit)
To: Commanding General, (Attn: Center Safety), Marine Corps Air Ground Combat Center, Twentynine Palms, CA 92278-8100
Via: (Commanding Officer, Unit (if Necessary))

Subj: REQUEST FOR OFF BASE SHIPMENT OF CLASS V MATERIAL

Ref: (a) MCO 8020.10
(b) CCO 8000.4B

Encl: (1) Route Map

1. It is requestd this command be authorized to transport the ammuition listed below on (Date) from the Center Magazine Area aboard MCAGCC 29 Palms to (Destination).

2. The following ammuniiton will be transported:

DODIC	NOMENCLATURE	QTY

3. The ammunition will be in convoy and the following route will be taken:

(Describe the route taken (i.e., MCAGCC 29 Palms to Adobe Road; Adobe Road to Lear Ave: etc...)

4. Necessary liaison will be effected with the Provost Marshall and the (State(s)) Highway Patrol as specified in reference (a).

5. Point of contact is (Name and Title) at (Phone Number).

Signature_____

Figure 3-1.--FORMAT TO REQUEST FOR OFF BASE SHIPMENT OF CLASS V MATERIAL

REQUEST FOR WAIVER TO COMBAT LOAD VEHICLES

(Heading)

8000
(Code)
(Date)

From: Commanding Officer, (Unit)
To: Commanding General, Marine Corps Air Ground Combat Center (Attn: Center Safety), Twentynine Palms, CA 92278-8100
Via: Commanding General, (Regiment/Division), (if necessary)

Subj: REQUEST FOR WAIVER TO COMBAT LOAD VEHICLES

Ref: (a) MCO 8020.10
(b) CCO 8000.4B

1. Per references (a) and (b) it is requested that a waiver be granted to authorize (applicable unit(s)) to "Combat Load" gun trucks while participating in (Name of event for training).

2. The justification for this wiaver is to permit each gun truck to carry a basic load of ammunition with (Type of Motor vehicle and type of weapon system). Combat loading will only be accomplished at (name of specific range(s)) for (time periiod(i.e., date(s)). Favorable consideration and approval of this request will allow us to safely train as we fight.

3. Gun crews consisting of (number of personnel) will be briefed prior to (Name of event for training) on the safety requirements and safe handling procedures that apply tothem while participating in this combat loading training event.

4. Point of contact is (Name and Title) at (phone number).

Signature_____

Figure 3-2.--REQUEST FOR WAVIER TO COMBAT LOAD VEHICLES

CHAPTER 4

STORAGE AND HANDLING OF MUNITIONS

CHAPTER 4

STORAGE AND HANDLING OF MUNITIONS

4000. CENTER MAGAZINE AREA. CMA personnel will be guided in their duties by references (b), (h), (q) and (u). Additionally, they will perform their duties in accordance with procedures directed in CMA SOPs 1 through 14.

4001. HANDLING OF CLASS V. The precision required in all phases of munitions manufacturing is all too frequently negated by the manner in which it is subsequently handled. Improperly handling of munitions may result in malfunctions with the inherent possible loss of life and damage to equipment. Close supervision of personnel handling munitions is mandatory. Ammunition technicians and ordnance handlers shall supervised untrained personnel in handling munitions. The below guidelines are set forth in order to provide proper supervision in the handling of munitions.

1. Regardless of the durability of the munitions packaging and ruggedness of the containers, drops from even a low height could result in damage to munitions. Particular concern are munitions with solid rocket motors (i.e., AT4s, JATO bottles). Solid rocket motors are subject to cracking which will, when fired, result in overpressure in the rocket motor and possible high order detonation. Rockets which show evidence of rough handling will be placed in an unserviceable condition code and shall not be fired.

2. Munitions will be handled in a manner which will prevent shock or friction. Munitions subjected to these conditions may result in misfire, detonation, damage and possible malfunction when fired.

3. Munitions will not be unnecessarily exposed to inclement weather or prolonged direct exposure of sunlight.

4. Ammunition and/or explosives shall not be thrown, dropped or tumbled over floors or over other containers.

5. Handling of ammunition and/or explosives shall be handled carefully to avoid obliterating or defacing the identification markings.

6. Wooden boxes that have been improperly treated with pentachlorophenal may present a serious toxic hazard to the personnel handling them. Crystals formed when the pentachlorolphenal has dried give off a toxic dust. When visibly obvious crystals are detected, a respirator, approved by the Bureau of Mines for dust that is not significantly more toxic than lead, shall be worn by all personnel engaged in the handling process.

7. No flame or spark producing devices will be carried or used by personnel handling munitions. There will be no smoking within 50 feet of munitions.

8. Mechanical equipment used in the handling of munitions will be in good condition both mechanically and electrically. If the equipment is stationary, it also must be grounded.

9. Evidence that munitions containers have been subjected to suspect conditions (roughly handled, exposed to the elements or extreme heat), will be promptly reported to the OIC or supervisor of that operation. Once discovered, the supervisor will:

a. Request technical assistance from qualified ammunition technicians or aviation ordnance handlers to determine if the munitions are serviceable.

b. When it is determined that the munitions are unsafe, assistance from EOD will be requested.

c. Isolate suspect munitions from serviceable munitions and mark it appropriately.

*****NOTE*****

Ammunition reclassified as unsafe to handle shall not be moved or inspected. Notify explosive ordnance disposal (EOD) personnel immediately.

10. Munitions shall not be disassembled, altered or modified except for those normal operations provided for in user level technical publications (e.g., fusing projectiles) and authorized operations performed by qualified EOD personnel.

11. Commanders will ensure that the individuals, crews or other groups are properly trained to handle, fire or otherwise expend munitions.

12. Small arms ammunition without lot identity, which is otherwise serviceable, can be returned to an issuable category if it can be determined that returned cartridges were issued from a specific lot and the lot has not since been reclassified by notice of ammunition reclassification or local action. In these instances, assign lot number from which ammunition was originally drawn and issue this ammunition to the next requisitioner from the parent command from which the turn-in was received.

4002. APPROVED MATERIALS HANDLING EQUIPMENT (MHE). Only approved MHE as described in references (y) and (z) will be used in routine operations involving ammunition and/or explosives.

1. General Regulations for MHE. Industrial MHE for use in ammunition and explosives handling operations include: forklift trucks, pallet trucks, platform trucks, etc.).

2. Selection and Use of MHE. Industrial MHE used for handling ammunition and explosives shall be chosen IAW reference (z). The proper type of equipment shall be selected based on the ammunition items to be handled, the type of handling situation involved and the location or area where the handling will be performed.

3. Marking of Industrial MHE. All industrial MHE used for handling ammunition and explosives is painted solid yellow with the exception of explosive -proof trucks and tractors. These are painted yellow with six-inch wide blue diagonal stripes at 45 degrees across each side and on the rear. Also, the designation, E, DS etc., is painted in three-inch black block letters on both sides and at the rear of all equipment. The equipment's safe working load (SWL), weight test date and vehicle weight must be clearly printed on an appropriate space that is in view of the operator.

4. Safe Operating Instructions for MHE. Personnel involved with handling ammunition and explosives shall have a thorough understanding of the operation, application and limitations of the vehicle used for handling and moving these dangerous materials in both hazardous and non-hazardous locations. All MHE operators must also be qualified and certified to handle conventional ordnance. Reference (z) provides detailed precautions and periodic test and inspection procedures related to the operational safety of industrial MHE.

5. Test and Inspection of Industrial MHE. Industrial MHE must be tested and inspected every 18 months and must always be tested and inspected after a repair as described in reference (z).

4003. AMMUNITION STORAGE IN ARMORIES. Limited quantities of small arms ammunition may be stored in unit armories. This authorization is limited to a total of 2000

cartridges for resident units and 200 for Reserve units aboard the Combat Center. Storage of small arms munitions in Combat Center's armories is governed by reference (aa).

4004. FIELD STORAGE OF MUNITIONS. Ammunition and explosives shall be stored at the CMA in magazines and storage structures and designated for that purpose IAW the provisions stated in reference (b). The following exceptions are allowed aboard the Combat Center:

a. The allowance of small arms in unit armories as specified in paragraph 4003 above.

b. The type of unique live-fire training allows for the field storage of ammunition and explosives. References (o) and (bb) provide the necessary guidance for storing munitions in the field.

4005. FIELD STORAGE AT CAMP WILSON'S FIELD AMMUNITION SUPPLY POINT (FASP)

1. Field storage of Class V(W) ammunition aboard the Combat Center's FASP located at Camp Wilson is authorized for use to provide support to ground forces for Marine Air Ground Tactical Forces (MAGTFs) during Dersert Fire Exercises (DESFIREXs) and Combined Arms Exercises (CAXs) training evolutions. Incoming CSSD unit(s) should coordinate an in brief meeting with the Combat Center's ESO preferably before the initial draw of ammunition begins. On-site inspections of Camp Wilson's FASP by the Combat Center's ESO will be done as necessary (approximately once a week). At the end of each MAGTF CAX evolution the ESO will provide an out brief for the respective CSSD unit(s) on deficiencies found during these inspections. A written report will be mailed to the CSSD unit(s) approximately two weeks after the CSSD unit(s) depart the Combat Center.

2. Per reference (o) waivers are required for field storage of ammunition in excess of 30 days. The Combat Service Support Detachment (CSSD) unit(s) operating the FASP shall request a waiver for field storage (figure 4-1). The request must be received by the Combat Center's ESO @ Bldg. #1447 no later than two weeks prior to the scheduled initial draw of training ammunition.

3. No later than two weeks prior to the scheduled initial draw of training ammunition CSSD unit(s) must submit to the Combat Center's ESO the following information:

a. A storage plan for the munitions being stowed at Camp Wilson's FASP. The storage plan will have type of munitions and DODIC/NALC being stowed in each storage area and appropriate quantity distance (QD) arcs annotated for the FASP. Distances can be found in Table 3-1 of reference (bb) and chapter 7 of reference (b).

b. The Combat Center Fire Department (both main camp and Camp Wilson locations) will be provided with a current fire map to indicate storage site, items and NEW stored therein and the highest hazard present for each storage area.

c. A Letter of Instruction (LOI) for Camp Wilson's, FASP. Sample copy of the LOI can be found in appendix A of this order. The LOI will address the following field storage procedures:

(1) Munitions will be stored by compatibility group.

(2) The maximum amount of the munitions that can be stored in a defined location (based on Net Explosive Weight (NEW) of the munitions), the available area and the location of billeting areas.

(3) Arrangement of munitions should be accomplished in such a manner to facilitate inventory and stock management.

(4) FASP access will be limited to authorized personnel only. Ensure all visitors are logged in and out of the FASP. It is important that visitors be checked for weapons and flame producing items before entering the FASP.

(5) Conducting daily inventories of SRC 1 materials.

(6) Establishing security requirements (guard force, fence, etc.) per reference (cc).

(7) Establishing a direct communications link between the FASP and the unit reaction force.

(8) Billeting areas will be established outside inhabited building distances.

(9) The FASP will be located at the minimum inhabited building distance for the maximum credible event (MCE) explosive potential "worst case situation."

(10) Sufficient fire fighting equipment will be made available in the event of a fire at each storage site. In addition, to the standard equipment (e.g., shovels, fire extinguishers), the following requirements apply:

(a) Fire class and division symbols will be placed on each berm indicating the highest explosive hazard present. The signs will be located in such a manner that they are visible from a minimum distance of 500 feet from the most likely avenue of approach.

(b) Berms containing White Phosphorous (WP) "Willie Pete" will have a full water barrel of sufficient size to completely immerse any leaking rounds. Additionally, each berm containing WP will have:

1 A gallon bottle containing 5% sodium bicarbonate solution (5/6 cup sodium bicarbinate to a gallon of water). Reference (b) provides additional related guidance.

2 One set of band cutters to facilitate removal of individual leaking rounds from pallets.

3 Personal protective equipment such as rubber gloves and rubber aprons to provide personnel safety equipment in the event of a leaking round.

(11) Only Class V assets will be stored in the FASP.

(12) Munitions will be stored per references (b) and (bb).

(13) Suitable wooden dunnage will be used in order to maintain ventilating space between the bottom of the stack and the deck. Munitions will be adequately protected against water and direct sunlight.

(14) Partially filled boxes will be plainly marked to indicate the DOD Identification Code (DODIC), national stock number (NSN), lot number and the quantity of items stored therein. Partially filled boxes will be conspicuously marked to indicate it is a partially issued (light) box and be placed on top of the stack. There will be only one light box per stack.

(15) Accurate storage arrangement records will be maintained in order to locate or determine the quantity of munitions in the FASP.

4006. TEMPORARY OVERNIGHT FIELD STORAGE. Munitions will not be stored in the field overnight, unless approved by the Range Scheduling Office. Request will be

forwarded to the Range Scheduling Officer, providing the following information no later than two days prior to establishing the temporary field storage site:

1. Area (grid coordinates) where the munitions are to be stored.

2. Quantity by DODIC of munitions to be stored.

3. Assurance that adequate protective and security measures will be established.

4. Assurance that quantity distance and compatibility requirements listed in reference (bb) can and will be enforced.

5. Number of days the site will be established.

6. Assurance that safety net communications will be established and maintained.

7. Assurance that Class V residue will be removed when the temporary storage site is no longer needed.

4007. CLASS V(A) STORAGE WITHIN THE AMMUNITION ISSUE POINT (AIP)

1. As similarly stated in paragraph 4005-1, the Combat Center's ESO will accomplish an on-site inspection of the EAF's AIP area and EAF as necessary. Deficiencies observed by the ESO will be coordinated with the EAF's Ordnance Safety Officer to correct deficiencies noted.

2. Basic field storage requirements for the AIP will be IAW paragraph 4005-3(c) above, however, the designed purpose and location of the AIP in relation to the Expeditionary Air-Field requires additional ordnance safety procedures. These procedures include:

a. The maximum Potential Explosion Site (PES) shall not exceed 30,000 lb.. NEW. Each PES shall be separated by using aboveground unbarricaded quantity distance (QD) standards for the appropriate Hazard Class in the tables listed in reference (b) (e.g., Hazard Class 1.1 munitions shall be stored IAW Table 7-22 Col. 11). Exception, the earthen eight-cell module is designed to facilitate 30,000 lb.. NEW per cell of MK 80 series bombs, 20mm to 30 mm in metal shipping containers and cluster bomb units (CBUs) in authorized nonflammable shipping containers.

b. Ammunition other than that specifically listed above, regardless of storage compatibility, shall not be stored in the eight-cell module unless the standards of Table 7-22 Col. 11 of reference (b) can be satisfied.

c. MK 77 Firebombs shall not be stored within the AIP after filling with an internal combustion engine fuel.

d. Gasoline powered vehicles and equipment are prohibited from entering the AIP.

e. The two-man rule shall be in effect upon entering the perimeter berms of the AIP.

f. Open fires (camp fires and refuse burning) are prohibited in the AIP and the encampment area.

*****WARNING*****

Wood used in packaging and bracing of ordnance is commonly treated with hazardous chemicals to prevent wood deterioration. Ingestion of hazardous chemicals, such as Arsenic and PCP, which are or were used in the wood treatment process, may occur if wood dunnage is burned.

4008. ORDNANCE OPERATIONS WITHIN THE AMMUNITION ISSUE POINT

1. An essential component of an AIP are the weapon assembly areas. Established procedures and safety standards not addressed in reference (bb) shall fall within the purview of reference (b).

2. Intraline quantity distance (QD) tables for the appropriate Hazard Class shall be used for the Bomb Assembly and Rocket Assembly areas. Only the earthen eight-cell module constitutes a barricaded D=9W1/3 QD factor for measurement to an assembly area. Under no circumstances will munitions be assembled/disassembled or unpacked for delivery within the eight-cell module.

3. Static grounding shall be accomplished in each stage of rocket assembly in the rocket buildup area. For this reason, only the designated area for rocket assembly shall be used.

4. Assembled rockets (in pod or out of pod) shall not point at any vertical structure within the AIP (e.g., cement wall).

5. Pre-building of rocket pods are authorized providing no more than 72 hours worth of normal rocket requirements are anticipated. Warheads shall not be assembled to the rocket motors until a rocket dispenser is available for immediate use.

6. Assembly of inert MK 80 series type practice bombs should be assembled in the same area designated for live bomb assembly. Break-out of cluster bombs should also be in the same area designated for bomb assembly.

7. Pre-building of live bombs are authorized providing no more than 72 hours worth of normal bomb requirements are anticipated.

8. Fill operations for MK 77 Firebombs shall be conducted at either the staging area outside of the AIP perimeter berms or on the flightline (preferred).

CHAPTER 5

MALFUNCTIONS AND ACCIDENTS

FIGURE

CHAPTER 5

MALFUNCTIONS AND ACCIDENTS

5000. APPLICABILITY. The provisions of this chapter are applicable to all units training with or handling munitions aboard the Combat Center.

5001. DEFINITIONS. An Explosive Mishap includes all of the following occurrences, near occurrences and/or circumstances:

1. Chemical Agent Accident. Any occurrence involving a chemical agent which, in the opinion of a medically trained authority, did result in a disabling injury or, did or will result in $10,000 or more damage to property from contamination.

2. Dangerous Defect. A defect, found upon visual examination or local test, in an explosive material/system which is capable of resulting in an explosive mishap (i.e., ruptures of explosive containers exposing filler, protruding primers, partially armed fuzes, safety devices missing or defective, etc.).

3. Explosive Accident. An unplanned explosion or fire involving an explosive material/system. This includes inadvertent actuation, jettison, release or launching there of resulting in a fatality or injury to personnel, fire, explosion or damage to property.

4. Explosive Incident. An occurrence which creates a potentially hazardous situation. Incidents include, but are not necessarily limited to:

a. Human errors in processing, assembly, testing, loading, storing, transporting, handling, using or disposing of an explosive material/system.

b. Unusual or unexpected occurrences, unnatural phenomena, unfavorable environments or instances of equipment failure which may damage or affect safety or reliability of an explosive.

c. Loss or abandonment of an explosive material/system resulting in a potential hazard to untrained personnel who may find the item.

d. Misused or unauthorized alteration of an explosive material/system.

e. Any failure or malfunction of, or damage to, a launched device or associated hardware which occurs when an explosive material/system is being handled or otherwise manipulated.

5. Explosive Near-Mishap. Any event, which, except for chance, would have been an explosive mishap.

6. Malfunction. The term applied to an explosive material/system when it fails to function in the manner for which designed. Malfunctions are considered major or minor as follows:

a. Major Malfunction. Failure to function in the manner for which designed, resulting in or potentially capable of resulting in, personal injury and/or material damage.

b. Minor Malfunction. Failure to function in the manner for which designed and does not result in injury or material dunnage and for which the potential for injury or material dunnage is remote (dud, downrange premature, etc.).

7. Hangfire. Temporary failure or delay in the action of a primer, igniter or propelling charge. (Exception: The U.S. Army's Multiple Launched Rocket System (MLRS) the pod refuses fire rocket when intended).

8. Misfire. Failure of a component to fire or explode following an intentional attempt to cause an item to do so. (Exception: The U.S. Army's (MLRS) the weapon system's launcher fire control system aboard the M998 carrier fails to operate correctly).

5002. MALFUNCTIONS, MISFIRES AND ACCIDENTS INVOLVING MUNITIONS

1. All personnel involved in the employment of munitions must be aware of the need for prompt evaluation and timely reporting of incidents and accidents where munitions have not functioned as designed. When such incidents occur, the individual in charge of the unit concerned must immediately begin to assemble the vital information which will permit timely and accurate evaluation and reporting.

2. The individual in charge of the firing exercise will have the following items in his possession:

a. A copy of the applicable range regulations.

b. NAVMC 10155 (Rev-10-71), Ammunition Malfunction Data Collection Guide (figure 5-1).

c. Telephone number for the MCAGCC EOD unit (extension 6885/7215).

d. A copy of reference (q).

5003. MALFUNCTION AND DEFICIENCY REPORTS

1. Reference (q) established procedures for the preparation and submission of Ammunition Malfunction and Deficiency Reports. A copy of NAVMC 10155 will be carried by all supervisory personnel involved in the handling and firing of munitions. The NAVMC 10155 will be used to collect data needed to report malfunctions per reference (q). The following procedures will be followed by the senior individual at the scene of the malfunction/accident.

a. The senior individual at the scene of the malfunction/accident will take the following action:

(1) Immediately order cease fire.

(2) Render assistance to casualties.

(3) Identify all witnesses to the malfunction.

(4) Safeguard weapons, materials or fragments which could provide evidence as to the cause of the malfunction.

(5) Initiate action to photograph weapons (in their original positions), material, munitions and fragments which could provide evidence as to the cause of the malfunction. All evidence will be held for 120 days after the malfunction for further investigation by higher authorities.

(6) Request that a service support unit inspect the weapon or munitions for serviceability. Weapons involved in a malfunction will be safeguarded by the Range Safety Officer or the OIC of the firing detail to preserve evidence until the service support unit has completed a technical evaluation.

(7) Identify and record all lot numbers of each munitions component (fuze, projectile, propellant charge, primer) when applicable.

(8) Record all evidence of unauthorized disassembly, alteration or substitution of the munitions and weapon involved.

(9) Establish details as to the proper or improper handling of munitions to include crimping, striking, exposure to open flame of weather conditions prior to the malfunction.

(10) Establish the degree of cleanliness of the munitions and weapon.

(11) Establish the condition of the munitions packaging and appearance prior to receipt.

(12) Segregate all of the malfunctioning lot for turn in to the CMA or supporting FASP. All CLASS V residue will be turned in unless the stability of the munitions are suspect. Suspect munitions will be inspected by EOD personnel prior to being turned in to the CMA or supporting FASP.

(13) Request EOD support as appropriate.

(14) Notify the OIC, CMA of the malfunction so that a local suspension of the affected lots may be imposed.

(15) Obtain all data and information required for the malfunction report. The exercise activity's parent unit will be notified.

(16) In cases involving injury to personnel or damage to equipment, retain all witnesses except those injured, at the scene until the investigating officer arrives.

2. When a malfunction involves injury or death, the incident will be reported by the most expeditious means available to the following personnel:

a. <u>During Working Hours</u> - Director, Operations and Training Directorate (O&T). O&T will notify the following personnel:

(1) MCAGCC Chief of Staff.

(2) Director, Installations and Logistics Directorate (I&L).

(3) Officer in Charge, Center Magazine Area.

(4) MCAGCC Safety Officer (Note: For the purposes of conducting a Safety Investigation).

(5) Combat Center Adjutant.

b. <u>After Working Hours</u> - Command Duty Officer, who will in turn notify the MCAGCC Chief of Staff; Director, O&T; Director I&L; MCAGCC Adjutant; Officer in Charge, CMA and other personnel in conjunction with the submission of OPREP-3 reports.

3. <u>Responsibilities of Unit Commanders</u>

a. When a malfunction occurs that does not involve injury or death, immediately notify the Director, I&L and the OIC, CMA for assistance in submitting the formal. After normal working hours, notify the Command Duty Officer, located in building 1554, extension 7200 and the CMA Duty NCO at extension 6116 and 6487.

b. Submit a message malfunction report, in accordance with enclosure (1) of reference (q), within 24 hours of the malfunction. Strict compliance is required in order to expedite submission. An advance copy of the report will be provided to the OIC, CMA. The malfunction message shall contain an information copy to MCAGCC Explosive Safety Officer. The Explosive Safety Officer's message address is: CG MCAGCC//SAFETY/CNTRINSP// . It is recognized that in some cases it will be virtually impossible to gather all the required information within 24 hours. In cases where all pertinent information cannot be provided in the initial report, a Supplemental report will be submitted within 15 working days of the initial report.

c. Appoint an investigating officer and immediately proceed with the conduct of the investigation.

d. Ensure the weapons found at fault during the investigation are suspended from use and properly labeled to prevent use until the defect/condition is corrected or evaluation instructions are received.

e. Malfunctions that are obviously attributable to weapon deficiencies shall be reported utilizing DD Form 368, Report of Deficiencies Found in Material, via the appropriate chain of command.

f. Provide for separate maintenance and security of the weapon, fragments and pertinent debris related to the malfunction for a period of 120 days unless directed otherwise by higher authority as outlined in paragraph 6a(2) of reference (dd).

5003. MALFUNCTION ATTRIBUTABLE TO OTHER CAUSES

1. Supervisory and responsible personnel must be aware that malfunctions and accidents are not always caused by faulty munitions. Common malfunctions and accidents which are not attributable to faulty munitions but human error or weapon failure are:

a. Misfires. Misfires are defined in paragraph 5001-8 above and as round of munitions in which the propellant has failed to ignite and which may be safely unloaded from the weapon. Other related information includes:

(1) Misfires resulting from human error or weapons are:

(a) Failure to completely close the bolt or breach mechanism.

(b) The improper assembly of firing mechanisms and firing locks.

(c) Failure to install the firing pin.

(d) A failure to replace a broken or worn firing pin.

(e) Weak springs in firing mechanisms and firing locks.

(2) Misfires will be handled by the using unit as follows:

(a) Munitions will be left in the weapon for the safe waiting period as prescribed in the appropriate technical instruction.

(b) When the appropriate time has elapsed: remove the round from the weapon, replace all safety devices and return it to the appropriate container.

(c) Properly mark and return the round to the CMA or supporting FASP if it has been determined that the round is safe for transportation.

(d) If the using unit is unable to withdraw the round from the weapon, EOD assistance should be requested.

b. Duds. Duds are defined as munitions items that have failed to function in accordance with the design intent when fired, launched or otherwise employed as specified (e.g., an AT4 fires but the warhead fails to detonate on impact). Related information includes:

(1) Duds resulting from human error or weapon failure are:

(a) Failure to remove safety wires, pins etc., from the fuze.

(b) The shearing off of delay fuzes on impact with hard, rocky surfaces.

(c) Failure to set the fuze from a safe to an armed position.

(d) The utilization of an improper fuze.

(2) Premature and delayed bursts result from:

(a) Improper fuze settings.

(b) Failure to remove muzzle covers and other obstructions.

(c) Improper machine gun head spacing.

(d) Permitting live rounds to remain in overheated weapon chambers.

(e) Abuse or mishandling of munitions and fuzes (e.g., striking fuze, primer or projectile against a sharp object).

(3) Although investigations and reports are required when the above incidents cause death, injury or damage, the cognizant personnel must be careful in evaluating the cause to ensure that munitions are not necessarily suspended when human error or a weapon failure are the cause.

5004. DEFECTIVE MUNITIONS. Munitions which cause a malfunction when fired will be reported in accordance with enclosure (3) of reference (q) to the Commanding General, MCAGCC (Attn: OIC, CMA). The report will be filed via the using unit's base and the appropriate chain of command for other units conducting exercises aboard MCAGCC.

CHAPTER 6

SALVAGE AND DISPOSAL

CHAPTER 6

SALVAGE AND DISPOSAL

6000. SALVAGE OF MUNITIONS COMPONENTS, SHIPPING AND STORAGE CONTAINERS

1. Using units will coordinate the turn in of all salvageable material with the Defense Reutilization Marketing Office. This office is open for turn in from 0800 to 1500, Monday through Friday. It is recommended that units make liaison with DRMO before training exercises to determine exact requirements.

2. The following general guidelines will be followed in the return of salvageable items (e.g., brass, links, ammo cans):

a. Fired brass (small arms: 7.62mm, .45 cal, .50 cal, etc.) will be segregated by type and will be free of all foreign substances such as steel clips, links sand, and dirt.

b. All markings or letting on the outside of the container must be obliterated and marked as empty. If empty ammunition containers are going to DRMO the following will be required;

(1) All markings or lettering on the outside of the container must be obliterated and marked as empty. As specified in references (i) and (n) empty containers that are subjected for turn-in to DRMO will be marked by affixing a weather resistant placard or tag to stenciled with the word "empty" in approximately one inch letters. Palletized containers will be marked with "empty" on one side of the pallet. Each ammunition container that is not palletized shall be individually placard, tagged, stenciled with the word "empty".

(2) Munitions containers will have all explosive residue and rounds removed. Plastic and cardboard must be removed from these containers and all hazardous markings must be obliterated and marked as empty.

(3) High dollar value containers (aviation ordnance containers, copperhead cans, etc.) will be returned to the CMA. All hazardous markings will be obliterated and will be marked as empty.

3. Reusable Material (Class V(A))

a. Units will turn in all reusable ordnance packaging materials to the CMA. The CMA will request disposition from Ships Parts Control Center or Naval Air as required.

b. Reusable materials are listed in reference (j). The following is a guide to determine which items are reusable:

(1) Cluster bomb unit containers.

(2) Laser guided bomb containers.

(3) Missile containers.

(4) Fuel air explosives bomb containers.

(5) Bomb pallets, all series.

(6) Metal pallets, all series.

(7) .50 cal, 20mm and 25mm gun ammo cans.

c. Covers for steel powder containers will be identified by type and munitions components (example: box wood f/3.5" rocket, containers, propellant 8", M19 etc.).

4. Unit commanders, when turning in fired cartridge cases and other inert munitions items, shall ensure that they have been thoroughly inspected by an officer. A Certification of Inspection (Form NAVMC 818) shall be executed by the inspecting officer stating that the material has been inspected and there are no live rounds, unfired primers, explosives or any other dangerous material contained therein. The signed certificate will be in each container and a copy will be provided to DRMO with the 1348-1 turn in document.

a. Trash and cardboard fillers are considered nonsalvageable materials.

CHAPTER 5

MALFUNCTIONS AND ACCIDENTS

CHAPTER 7

EXPEDITIONARY AIR FIELD OPERATIONS

7000. GENERAL

1. The EAF is unique in it's design, mission and operation tempo. Because of this, written publications are frequently vague in operational requirments in an advance base enviroment compounded by the lack of another model for deploying personnel to draw on thier experience. Squadrons shall consider the EAF a Combat Loadinf Area (CALC) and are subject to the requirements therein. The following are the minimum requirments:

a. All deploying squadrons are subject to and required to follow the Maintenance Intructions (MI's) used at a home base.

b. Building 2452 is designed as the work space for fixed wing ordance personnel. This designation is derived froma clear need to isolate ordance operations form areas from unauthorized personnel. This location also allows easier access for emergency response to deterioting safety condiftions.

c. Munitions with the exception of inert practice bombs without spotting devices and Cartidge Actuated Devices (CAD's) stored in the ready storage lockers (RSL's) shall not be stored or staged at the EAF without clear need for use via the Daily Flight Schedule. MK 77 fire bombs may be temporairly stored at the flight line is canceled from the flight schedule providing the intiators are removed and returned to ACE ordance personnel.

d. Munitions staged at the EAF shall always be under constant competent supervision.

e. Munitions within the EAF shall not exceed 300 lbs. NEW and shall not be higher than hazard claa/division 1.3.

7001. AIRCRAFT LOADING/DEARMING

1. Aircraft shall be grounded to existing rods prior to loading/downloading of ordance.

2. No more than one ordance laden trailer may be pulled onton the flight line at a time per towing vehicle at walking speed.

3. Munitions shall be strapped to ots perspective weapons cradle until just prior to loading.

4. K-4 trailers shall be chocked and the hand brake will be set when the trailer is not in motion. Reliance on the towing vehicle for braking in a parked condition is not authorized.

5. Aircraft may be fueled after loading without regard to weapons loaded. Simultaneous fueling and loading is prohibited. Ordance laden aircraft being fuelded shall remain grounded and have competent supervision availible.

6. Aircraft with ordance of any type are prohibited from entering the wash rack area.

7002. AIRCRAFT ARMING/DEARMING

1. Forward firing ordance regardless of hazard class shal be armed and dearmed in designated areas only. Fixed wing aircraft shall use the end of the runways. Rotor wing aircraft may use the end of the runway at a 10 degree offset from the centerline of the runway (e.g. end 1010is 110 degrees, Approach end 280 is 290 degrees. LZ Gunfighter/Red are 140 to 220 degrees).

2. Free fall ordance may be armed on the aircraft ramp provided forward firing ordance is not present.

3. Hung free-fall ordance, except inert practice bombs, shall be determined in the areas designated as forward firing areas.

4. Aircraft guns that are jammed and can not be dearmed without Intermediate Level Ordance assitance shall be taxied or towed to the Dearm Area at the Approach End 280.

CHAPTER 8

SAFETY

FIGURES

CHAPTER 8

SAFETY

8000. GENERAL. Safety is the utmost importance in the storage, handling, transportation and live fire training operations of munitions and is the responsibility of each individual concern. Complete understanding and strict observance of specified safety regulations are necessary to eliminate the unsafe acts and conditions that cause preventable accidents. The two most important considerations in handling ammunition and explosives are safety and responsibility. The primary responsibility should be to present any condition which may cause injury or death to military and civilian personnel. All personnel involved in the handling of munitions will be thoroughly indoctrinated in safety precaution, procedures and principles.

8001. STANDARD OPERATING PROCEDURES (SOPs)

1. All personnel who come aboard the Combat Center shall conduct ordnance operations in the safest manner possible. The SOP is the required document by which personnel involved in ordnance operations aboard the Combat Center integrate various items (technical requirements, explosive safety standards, Navy Occupational Safety and Health (NAVOSH) standards etc.).

2. The following actions will be followed:

a. CG, MCAGCC is responsible for developing, validating, approving, reviewing and using SOPs for ordnance operations.

b. Prior to starting any ammunition and/or explosives operation an SOP will be developed.

c. Reference (ee) provides the standard for which an SOP is created and for all repetitive operations. Those operations stated in paragraph 2-1.1.1, reference (b), reference (ee) shall be used.

8002. REPORTING UNSAFE CONDITIONS. All unsafe conditions or unsafe acts in and around magazines, operating buildings or explosive areas shall be immediately corrected, if possible and promptly reported by personnel to the immediate OIC or SNCOIC. The OIC or SNCIOC shall act positively to eliminate and prevent the reoccurrence of the potential accident hazards.

8003. UNAUTHORIZED USE OF AMMUNITION. Ammunition and explosive assemblies shall be used only in the guns or equipment for which they were designed. Any tampering with ammunition, ammunition components and explosives is prohibited. Unauthorized assembly of explosive components into inert ammunition items is prohibited.

8004. INERT-LOADED, DUMMY AND DRILL AMMUNITION. Unless authorized, only inert ammunition shall be permitted for drill or training purposes, displays (public or otherwise), demonstrations, public functions or patriotic occasions as authorized by (ff). The following standards shall be used when certifying munitions as "inert":

1. All division and/or unit commanders shall ensure that all inert-loaded or empty ammunition and their components are inspected and certified to be "inert" ordnance and properly labeled as such.

2. Only qualified ordnance personnel to include EOD personnel can inspect and certify ammunition items that are to be labeled "inert". All inert ordnance items that are the property for the division/unit aboard the Combat Center shall keep on file a Record of Certification and Identification of Inventoried Inert Ordnance

Training Aids/displays (figure 8-1). A complete list of all inert items shall be retained by the division/unit and are subject to review by NAVSEA Explosive Safety Inspectors as well as the Combat Center's Explosive Safety Officer.

3. Proper procedures to label, certify and record ordnance items that are "inert" can be located in paragraph 2-1.4.2 (a-d), reference (b).

8005. HOUSEKEEPING IN AMMUNITION AREAS. The following provisions shall be observed when conducting housekeeping activities in ammunition areas:

1. Magazines and Magazine areas and all other buildings within explosive areas shall be kept scrupulously clean and orderly at all times. A regular cleaning program shall be initiated and executed as frequently as is required to maintain good housekeeping. General cleaning should not be done while hazardous operations are being performed.

2. Aisles in buildings that contain ammunition or explosives shall be kept clear. Safety exits such as doors and their outside passageways, ramps and stairways shall not be blocked. Doors and locks shall be kept in good working order. Requirements for exits from magazines are addressed in paragraph 11-3.2 of reference (b).

3. Access to safety equipment (i.e., fire alarms, fire hydrants, fire extinguishers, etc.) shall not be blocked. The location of safety equipment shall be appropriately and conspicuously marked to indicate the equipment's accessibility.

4. When not in use tools shall not be left on floors, decks platforms, etc. Tools shall be collected and returned to appropriate storage areas (i.e., lockers, cribs, bins, etc.)

5. Floors shall be kept clean and free of oil, grease or other materials that tend to make them slippery.

8006. AIRCRAFT OVER-FLY RESTRICTIONS. Aircraft, including rotary wing aircraft, are not permitted to fly at an altitude of less than 500 ft. over magazines or ammunition staging areas while ammunition handling is in process. Every effort will be made to identify aircraft that violates these requirements and a report of each incident shall be forwarded to the appropriate unit commander.

8007. APPROPRIATE SAFETY GEAR. Personnel protective equipment consists of garments and devices necessary to protect individuals against hazards inherent to the performance of specific jobs. Requirements for specific kinds of personal protective equipment should be established. Requirements for special safety equipment are addressed in paragraph 2-4 and subparagraphs thereafter in reference (b).

8008. INHERENT HAZARDS OF MUNITIONS. Munitions are designed to inflict casualties and destroy property and material. It makes no distinction between friend or foe. Negligence and improper handling can cause it to function before its intended use or to malfunction when not properly used.

1. Accidental Explosions. A few causes of accidental explosions are:

    a. Fire.

    b. Rough handling.

    c. Sustained subjection to high temperature.

    d. Alteration and/or modification.

2. Fire Hazards. The following precautions shall be taken to protect munitions from fire:

a. Unless written authorization has been given by CG, MCAGCC, matches cigarette lighters and other spark producing devices are not permitted in explosives areas.

b. When munitions are in open storage matches lighters or other spark producing devices shall not be permitted within 50 feet of munitions.

c. The ground around all magazines and outdoor explosive storage sites should be free of combustible material. Rubbish shall not be permitted to accumulate and vegetation will be kept under 18 makes to prevent rapid transmission of fire.

d. Personnel shall follow smoking regulations as well as the use of fire producing devices as addressed in paragraph 4-1.2.1 of reference (b).

e. Work requiring soldering, melting of asphalt, use of blow torches or heat or spark producing devices will require a signed hotweld permit (figure 8-2) issued by MCAGCC Explosive Safety Officer. Directions for the acquisition of a hotweld permit are addressed in paragraph 4-1.3.4 of reference (b).

CHAPTER 9

STORAGE OF AMMUNITION IN ARMORIES

FIGURES

CHAPTER 10

STORAGE OF AMMUNITION IN ARMORIES

9000. GENERAL. Per references (b) and (o) small arms ammunition is considered to be all ammunition up to and including .60 cal and all gauges of shotgun shells. This type of ammunition is utilized in sidearms, shotguns, and automatic weapons. IAW reference (o), CG, MCAGCC can grant authorizations to store limited quantities of hazard class/division 1.3 and 1.4 ammunition/explosives in facilities such as: hangers troop buildings, armories and manufacturing of operating buildings without regard to quantity-distance requirements specified in reference (b). However, all storage shall comply with fire protection regulations and safety/physical security requirements outlined in references (h) and (cc). Because of these special requirements placed upon each unit in the main camp area, waivers IAW reference (o) must be requested. Accountability procedures for all ammunition/explosives stored in armories shall be enforced per reference (g).

9001. STORAGE OF AMMUNITION . The following storage authority limitations shall be strictly enforced:

1. No more that 25 pounds Net Explosive Weight (NEW) of hazard class/division 1.4 shall be stored.

2. No more than 10 pounds NEW of hazard class/division 1.3 shall be stored.

3. No hazard class/division 1.1 or 1.2 shall be stored in unit armories.

4. When combining hazard class/division1.3 and 1.4 items no more than 35 pounds total NEW may be stored, of which no more than 10 pounds NEW may be hazard class/division 1.3 items.

5. For EOD units, CG, MCAGCC can grant authorization to store up to 50 pounds NEW of hazard class/division 1.3 and 1.4 ammunition items in EOD operating buildings without regard to explosive safety quantity-distance.

6. CG, MCAGCC can grant EOD units that will store ammunition items such as M174 cartridges, m137 diver recall devices; MK 13, MK 99 and Mk 124 distress flares in EOD operating buildings aboard MCAGCC. The total NEW shall not exceed 50 pounds per site. .

9002. REQUESTING AUTHORIZATION TO STORE IN UNIT ARMORIES. To obtain an authorization from CG, MCAGCC to store ammunition the request for such authorization, must be staff routed and include identification and quantity data as required per figure 10-1.

9003. SAFETY REQUIREMENTS FOR STORAGE OF AMMUNITION IN ARMORIES. Per reference (o), the Explosive Safety Officer (ESO) will review, annually, all storage authority requests on a case-by-case basis. Per reference (b), the ESO will inspect, annually, each facility for the following minimum requirements:

1. Inert or dummy ammunition which have no explosive elements are allowed for storage in armories. To determine hazard classification, storage compatibility grouping and inert/dummy classification refer to reference (h).

2. Small arms cartridges must be separated in storage, i.e., secured under separate lock in an appropriate locker, safe or other container from the weapon systems in which they are intended to be used. Original ammunition boxes shall not be used as containers. A roster of personnel authorized to possess keys or to know safe combinations of ammunition containers must be established.

3. An accurate and up to date accountability system shall be enforced to account for every cartridge whether stored in the container or issued to a guar, duty NCO or officer. The accountability system shall also include inert ammunition items. A weekly inventory shall be conducted of all ammunition items stored in the armory and this inventory must be documented by using NAVMC Form 10774, Figure 10-2.

6. Small arms ammunition containers must be clearly marked as containing ammunition and must be separated from other hazardous materials.

7. The following documents shall be kept inside of or in close proximity to small arms ammunition containers:

a. Authorization document from CG, MCAGCC to store small arms ammunition in the unit armory.

b. Roster of personnel authorized to possess keys and/or have knowledge of safe combinations.

8. Each unit providing storage of small arms will have the authorization to store granted by the ESO. It will notify the Combat Center's Fire Department of the location and quantity of ammunition on hand.:

FORMAT FOR AUTHORIZATION REQUESTING TO STORE SMALL ARMS AMMUNITION IN UNIT ARMORIES

(Heading)

8000
(Code)
(Date)

From: (Commanding Officer, Unit)
To: (Commanding General, Marine Corps Air Ground Combat Center, Attn: Center Safety)
Via: (Commanding Officer (Chain of Command))

Subj: REQUEST AUTHORIZATION TO STORE SMALL ARMS AMMUNITION IN UNIT ARMORY

Ref: (a) MCO 8020.10
(b) CCO 8000.4B

1. Per references (a) and (b), it is requested to granted this command to store the below listed ammunition in (Units Name) armory in (location). This ammunition will be used for security and alert purposes.

DODIC	NOMENCLATURE	QTY	N.E.W.	CLASS/DIVISION

2. Point of contact is (name & title), at extension (number).

Signature_____

Figure 9-1.--FORMAT FOR AUTHORIZATION REQUEST

CHAPTER 10

CONDUCT OF EXERCISE

CHAPTER 10

CONDUCT OF EXERCISE

10000. CONDUCT OF EXERCISE

1. Safety during training is a command responsibility. Commanders should satisfy this responsibility through the use of regulary assigned safety personnel. Whenever there is an exercise which has inherently unusual safety factors, a safety officer familiar with the hazards will be appointed in the exercise letter of instruction.

2. Ground safety procautions to be observed during the exercise include but are not limited to:

a. Pyrotechnics are to be employed only in such a manner that the empty shell or projectile will not fall among troops.

b. Prior to issue and use, blank ammunition will be inspected to ensure that they do not contain ball round mixed in it. If ball munitions are discoverd with blank rounds, tactical operations will be ceased immediately abd the nearest umpire or safety officer will be notified.

c. Debris of any sort will not be inserted into the barrel of any weapon.

d. Trip flares will be fenced or other wise guarded in such amanner as to prevent a person from approaching within six feet.

e. Blanks and pyrotechnics will not be fired within 150 meters of aircraft operations areas.

f. Duds discoverd by exercise participants will not be destroyed, moved, touched, or tampered with in any manner. They will be marked with a rag, stake, or similiar device and reported immediatley to the unit commander, umpire, safety officer.

g. Chemical munitions (CS, HC, etc.) will not be thrown or employed in enclosued spaces (e.g., tents, vans, vehicles, etc.).

h. Per reference (s), munitions cleared for overhead fire will only be used when unprotected personnel occupy or cross wthin artiliry range surface ganer zone. Due to limited quantities of cleared artillery rounds availible in the system, sleared munitions must be only requisteioned when required to satisfy this requirment. The needless ordering of cleared munitions will deplete the readily availible stocks and eliminate this fire and maneuver practice.

i. Paragraph 3-1 of reference (f) diects that units:

(1) Locate all munitions outside the back-blast area (when applicable) for the weapons involed.

(2) Store munitions at a postiion that will minimize the potential for ignition, explosion, or rapid burning.

(3) Limit the unpacing of munitions at the firing line to the minimum number of rounds needed to satisfy immediate firing requirements.

(4) Retain packing material, lifting plugs, grommets, propelling increments and fuses until firing is complete.

(5) Wooded munitions containers shall no be burned.

(6) Munitions will not be indiscriminately fired to preclude it from being return to the storage sites.

3. Other Factors to consider:

a. Cover rarely exists in the desert.

b. Sand can enter uncovered tupes and cavities.

c. Heat and sunlight may cause the surface temperature of munitions to become extremely high. Gloves will be used to handle munitions if cover is not availible. Covers such as tarps and camoflauge netting may be used to reduce heat.

d. Rust may become a factor is munitins are not protect from the enviroment.

e. Do not overload vehicles in soft sand areas. Vehicles may become stuck if not kept on improved surfaces. An increase load wieght may overwork the engine and steering may become inoperative.

f. Atmosheric disturbances, high winds and thunderstorms are local hazards.

g. Rattlesanles, scorpions, and spiders may seek shade in and under pallets of munitions.

APPENDIX A

ABBREVIATIONS/ACRONYMS

1. The follwoing list of abbrevaitions and acronyms are used in publications and directives dealing with ammunition and explosives. Not all are used in this order, however, users should be familiar with all of these. Others may be located in UM 4400.71.

A,A & E	AMRMS, AMMUNITION AND EXPLOSIVE
A, A	ANTI-AIRCRAFT
A, AC	ANTI-AIRCRAFT, COMMON
ACFT	AIRCRAFT
ADAM	AREA DENIAL ARITILLERY MUNITIONS
ADF	AUXILIARY DENTOTING FUZE
AGM	AIR TO GROUND MISSILE
AIM	AIR INTERCEPT MISSILE
AIP	AUMMITION ISSUES POINT
AMATOL	A MIXUTER OF AMMONIUM NITRATE AND TNT
AMCR	ARMY METERIAL COMMAND REGULATION
AMMO	AMMUNITION
AMMO NON-EXP	AMMUNITION, NON-EXPLOSIVE
AMS	ACTUATED MINES SIMULATOR
AP	ARMOR PIERCING
APDS	ARMOR PIERCING, DISCARDING SABOT
APERS	ANTIPERSONNEL
API	ARMOR PIERCING, INCENDIARY
API-T	ARMOR PIERCING INCENDIARY, TRACER
APT	ARMOR PIERCING, TRACER
ASSY	ASSEMBLY
AT	ANTI-TANK
ATM	AIR TRAINING MISSILE
BD	BASE DETONATING
BSTR	BOOSTER

CAL	CALIBER
CC	CONDITION CODE
CG	COMMANDING GENERAL
CHEM	CHEMICAL
CHG	CHARGE
CMNT	COMPONENT
CN	CHLORACETOPHENE (TEAR GAS)
CNO	CHIEF OF NAVAL OPERATIONS
COM	COMMON
COMP	COMPATIBILITY
COMP A	EXPLOSIVE MAIN CHARGE OF RDX AND WAX
COMP B	EXPLOSIVE MAIN CHARGE OF RDX, TNT, AND WAX
COMP B-4	EXPLOSIVE MAIN CHARGE OF RDX, TNT, AND WAX
COMP C-2	EXPLOSIVE MAIN CHARGE MIXTURE, PRIMARILY RDX
COMP C-3	EXPLOSIVE MAIN CHARGE MIXTURE, PRIMARILY RDX
COMP C-4	EXPLOSIVE MAIN CHARGE MIXTURE, PRIMARILY RDX
CTG	CARTRIDGE
DB	DOUBLE BASE
DBL	DOUBLE
DC	DEPTH CHARGE
DEMO	DEMOLITION
DET	DENTORNATOR, DENOTATING
DM	AMAMDITE (ANAUSEA PRODUCING AGENT)
DOD	DEPARTMENT OF DEFENSE
DOT	DEPARTMENT OF TRANSPORTATION
DODAC	DEPARTMENT OF DEFENSE AMMUNITION CODE
DODIC	DEPARTMENT OF DEFENSE IDENTIFICATION CODE
DS	DISCARDING SABOT
EA	EACH
ELECT	ELECTRIC
EMERG	EMERGENCY

EOD	EXPLOSIVE ORDANCE DISPOSAL
ESQ	EXPLOSIVE SAFETY QUANTIY DISTANCE
EX	EXERCISE
EXPL	EXPLOSIVE
EXT	EXTINGUISHER
F	FLASHLESS
FASP	FIELD AMMUNITION SUPPLY POINT
FL	FLAMMABLE LIQUID
FLEX	FLEXIBLE
FMU	FUSE MULTIBLE USE
FRAG	FRAGMENTATION, FRAGMENTING
FZ	FUZE
FIN	FEDERAL ITEM IDENTIFICATION
FSN	FEDERAL STOCK NUMBER
FC	FUND CODE
GM	GUIDED MISSILE
GREN	GRENADE
GBL	GOVERNMENT BILL OF LADING
GW	GUIDED WEAPON
HC	HEXACHLOROETHANE-ZINC MIX (SMOKE MIX)
HE	HIGH EXPLOSIVE
HEAT	HIGH EXPLOSIVE, ANTI-TANK
HEICM	HIGH EXPLOSIVEM IMPROVED CONVENTIONAL MUNITIONS
HE-P	HIGH EXPLOSIVE DUAL PURPOSE
ID	IDENTIFICATION
ILLUM	ILLUMINATION
INCEND	INCENDAIRY
IRR-MAT	IRRITATING MATERIAL
LAU	LAUNCHER
LDD	LOADED
LIN	LINEAR

MATL	MATERIAL
MK	MARK
MN	MILLIMETER
MT	MECHANICAL TIME
MTSQ	MECHINICAL TIME, SUPER QUICK
N/A	NOT APPLICABLE
NALC	NAVY AMMUNITIONS LOGISTICS CODE
NEW	NET EXPLOSIVE WEIGHT
NO	NUMBER
NSN	NATIONAL STOCK NUMBER
ORD	ORDANCE
PD	POINT DETONATING
PD/D	POINT DETONATING, DELAY
PDF	POINT DETONATING FOZE
PDR	POWDER
PRI	PRIMER
PROJ	PROJECTILE
PROP	PROPELLANT
PYRO	PYROTECHNIC
PROX	PROXIMITY
QD	QUANTITY DISTANCE
RAP	ROCKET ASSISTED PROJECTILE
SAP	SEMI-ARMOR PIERCING
SENS	SENSITIVITY
SMK	SMOKE
SP	SMOKELESS POWDER
T	TRACER
TRNG	TRAINING
TNT	2-4-6 TRINITROTOLUENE
TP	TARGET PRACTICE
U/I	UNIT OF ISSUSE

UK	UNITED KINGDOM
VT	VARIBLE TIME
W/O	WITHOUT
WP	WHITE PHOSPHOROUS

APPENDIX B

DEFINITIONS

The definitions in this appendix are applicable to reference (b) and are in agreement with other statutory publications where individual weapons or weapons systems publications employ these terms to include a different scope of action. Not all are used in this order; however, personnel involved in the handling of ammunition and explosives should be familiar with these definitions.

ACCIDENT - Any unplanned act or event which results in damage to property, material, equipment or cargo or personnel injury or death when not the result of enemy action.

AMMUNITION - A device charged with explosives, propellants, pyrotechnics, initiating composition, riot control agents, chemical herbicides, smoke and flame for use in connection with defense or offense including demolitions. Excluded from this definition are devices charged with chemical agents as defined in JCS PUB 1, and nuclear or biological material. Ammunition includes cartridges, projectiles (including missile rounds), grenades, mines, pyrotechnics, propellants, fuzes, detonators and small arms individually or having a unit of issue, container or package weight of 100 pounds or less.

AMMUNITION AND EXPLOSIVES - As used herein, ammunition and explosives included (but is not necessarily limited to) all items of ammunition; propellants, liquid and solid; high and low explosives; guided missiles; warheads; devices; pyrotechnics; chemical agents; compensate thereof and substances associated therewith presenting real or potential hazards to life and property.

AMMUNITION COMPONENTS - Integral units which are part of a complete round of ammunition. Ammunition components may consist of either inert or explosive loaded parts, or both.

AMMUNITION LOT - A quantity of ammunition which has been assembled from uniform components under similar conditions and which is expected to function in a uniform manner. Each ammunition lot is assigned a number.

AMMUNITION LOT NUMBER - The code number that identifies a particular ammunition lot.

BLANK AMMUNITION - Ammunition that consists of a cartridge case with a primer and powder charge but which does not contain any projectile. Blank ammunition is used for simulated fire, for signaling and for training exercises.

BLASTING AGENTS - A material designed for blasting which has been tested in accordance with section 173.114a of DOT regulations and found to be so insensitive that there is very little probability of accidental initiation to explosion or of transition from deflagration to detonation.

BOMB TYPE AMMUNITION - Ammunition that is characterized by a large high explosive charge-to-weight ratio such as aircraft bombs, warheads, guided missiles, depth charges and mines that are designed for dropping, launching or planting. This type ammunition depends on the destructive blast effect of the explosive at or near the target rather than the penetrative effect of the explosive container.

BOOSTER - A high explosive element of a warhead or similar explosive device used to initiate the high explosive main charge. The vernacular term "booster rocket" generally means a rocket power plant used to accelerate a missile during takeoff; this name is inadequate for designating a booster rocket because of the unrelated meaning. Missile booster rockets are officially designated as "rocket motors."

CARTRIDGE - A complete round of ammunition in which the primer, propelling charge and projectile are completely assembled to the cartridge as fixed ammunition; or the primer and the propelling charge are assembled in the cartridge case and closed by a friable plug.

CARTRIDGE ACTUATED DEVICE - Explosive loaded devices designed to act as a gas generator, or to provide a stroking action or a special purpose action or a special purpose action. Actuated devices may be reusable, employing an expendable cartridge for each design action or may be a sealed unit with a one-time function capability. The amount of explosive contained in these devices is normally small.

CHEMICAL AMMUNITION - Chemical ammunition includes a variety of items, the effect of which depends primarily upon the chemical agent filling rather than upon explosive or shrapnel, even though an explosive or ignition element is required to activate the ammunition. Included in this category are projectiles, bombs, shells, grenades, rockets, mines, aircraft spray tanks and any other containers or devices used to disperse chemical agents.

COMBUSTIBLE LIQUID - Any liquid having a flash point at or above 100 degrees Fahrenheit and below 200 degrees Fahrenheit.

COMPATIBILITY - A relationship between different items of ammunition, explosive and other hazardous materials whose characteristics are such that a quantity of two or more of the items stored or transported together is not significantly more hazardous than a comparable quantity of any one of the items stored or transported alone.

COMPLETE ROUND - A term applied to an assemblage of explosive and non-explosive compensate designed to perform a specific function at the time and under the conditions desired.

COMPONENT - Any part of a complete round whether loaded with explosives or inert materials or empty.

DEMOLITION MATERIAL - Explosives and accessories used for blasting, eliminating hazards to navigation and obstacles to amphibious landing or for destroying equipment.

DETONATION - A violent chemical reaction within a chemical compound or mechanical mixture evolving heat and pressures. A detonation is the reaction which proceeds through the reacted material toward the unreacted material at a supersonic velocity. The result of the chemical reaction is exertion of extremely high pressure on the surrounding medium forming a propagating shock wave which is originally of super-sonic velocity. A detonation, when the material is located on or near the surface of the ground, is normally characterized by a crater.

DOT CLASS - A category of materials classified by DOT based on the character and predominance of the associated hazards and of the potential for causing personnel casualties or property damage. The hazard classes are Explosives A, B and C; Blasting Agents; Flammable Liquid; Flammable Solids; Combustible Liquids; Flammable Gas; Nonflammable; Oxidizer; Organic Peroxide: Corrosive Material; Etiological Agent; Orm-A; Orm-B; Orm-C and Orm-D. Refer to Bureau of Explosives Tariff No. BOE-6000, Title 49 CFR, section 173 for definitions.

DOUBLE BASE POWDER - A casting powder whose principal explosive ingredients are nitroglycerin and nitrocellulose.

EMPTY AMMUNITION - An ammunition item or component whose explosive material has completely been removed and not replaced by other materials or which was not loaded at time of manufacture.

EXPLOSIVES - The term "explosive" or "explosives" includes any chemical compound or mechanical mixture which, when subjected to heat, impact, friction, detonation or other suitable initiation, undergoes a very rapid chemical change with the evolution of large volumes of high highly heated gases which exert pressures in the surrounding medium. The term applies to materials that either detonate or deflagrate.

EXPLOSIVES LIMIT - The maximum quantity of explosives or ammunition permitted in a magazine, production building or other specified site. Explosive limits are base on quantity-distance damage considerations and expressed in net pounds of explosive, number of rounds or units or other measuring units. Also called Explosive Quantity.

EXPLOSIVES SAFETY DISTANCE - The prescribed minimum distance between the hazard class 1 divisions and quantities (net weight) of explosives and between such explosives and specified exposures (inhabited buildings, public highways, public railways, petroleum, aircraft) affording an acceptable degree of protection and safety. See Quantity Distance.

FIXED AMMUNITION - Gun ammunition, larger than .60 caliber, in which all components are completely assembled, the projectile is rigidly crimped to the cartridge case, and the entire unit is loaded into the gun in one operation.

FRAGMENT DISTANCE - The limiting range of a majority of fragments generated by an explosion of ammunition. Fragment distances are normally distances for hazard class 1, division 2 items as prescribed in NAVSEA OP 5 Vol 1.

HAZARD - Any condition which may cause an accident or contribute to the severity of an accident. For purposes of classification, four general types of hazards are recognized in conjunction with ammunition and explosives. These are mass explosion hazard, mass fire hazard, non-mass detonating (fragmenting) hazard and moderate fire, no blast hazard.

HAZARDOUS MATERIAL (HM) - The component of, or an item of ammunition which is inherently designed to produce the necessary energy required for ignition, propulsion, detonation, fire or smoke, thus enabling the item to function. Also, a material (corrosive, oxidizer, etc.) which inherently is dangerous and capable of serious damage and which, therefore, requires regulated handling to avoid creating accidents in connection with its existence and use.

INCENDIARY - A chemical agent primarily for igniting combustible substances with which it is in contact by generating sufficient heat to cause ignition.

MAGAZINE AREA - The area on shore surrounding a magazine or group of magazines. The term is used to denote the areas adjoining or surrounding explosive storage where freedom of action is restricted in the interests of safety.

OPERATIONAL INSPECTION - An observed demonstration of the capability of an inspected unit or activity to perform the mission and task for which it is organized or designed. The objectives of operational inspections are to obtain:

a. A realistic evaluation of the operational and material readiness of combat units to perform assigned missions.

b. An evaluation of the adequacy with which shore based commands or units execute assigned missions in support of the readiness of combat forces.

PROTECTIVE CLOTHING - Clothing especially designed, fabricated or treated to protect personnel against hazards caused by extreme changes in physical environment or dangerous working conditions.

QUANTITY-DISTANCE - The quantity of explosives material and distance separation relationships which provide defined types of protection. These relationships are based on levels of risk considered acceptable for the stipulated exposures and are tabulated in the appropriate quantity-distance tables. Separation distances are not absolute safe distances but are relative protective or safe distances. Distances greater than those shown in tables in NAVSEA OP 5 Vol 1, Chapter 7 should be used wherever practicable.

RIOT CONTROL AGENT - A chemical that produces only a temporary irritating or incapacitating effect when used in field concentrations.

SAFE WORKING LOAD - The maximum weight impounds which should be lifted by handling equipment such as cranes, sling, forklift trucks, beams and similar handling equipment. The safe working load shall be marked on the lifting equipment.

SEPARATED AMMUNITION - Ammunition in which the projectile and the cartridge case are two units that are usually loaded into the gun separately.

SEPARATED-LOADING AMMUNITION - Ammunition in which the projectile and charge are loaded into a gun separately.

SIGNALING SMOKE - Any type of smoke, usually colored, emitted from a hand or rifle grenade or from a pyrotechnic signal.

SMALL ARMS AMMUNITION - Ammunition for small arms; i.e. all ammunition up to and including .60 caliber and all gauges of shotgun shells. Also includes 14.5 and 20mm ammunition which does not have high explosive or incendiary loaded projectiles.

SURVEILLANCE - The observation, inspection, examination and testing (physically, chemically and ballistically) of explosives and ammunition, by the method and in the manner prescribed for each specific material, to determine its stability or its safety for further storage. Surveillance applies not only to the explosive elements themselves but to all precautions and instructions tending to protect property and personnel against the hazards inherent to all explosives including methods of handling, packing, marking, storing, segregating, shipping, condition of containers and reports of conditions.

TOXIC CHEMICALS - Toxic chemicals are define by the Department of Transportation according to the degree of poisonous hazard in transportation. These classifications, used by the Navy for the transportation purposes, are as follows:

a. Class A - Extremely Dangerous Poisons. Poisonous gases or liquids of such nature that a very small amount of gas or vapor of the liquid mixed with air is dangerous to life.

b. Class B - Less Dangerous Poisons. Substances, liquids or solids (including pastes and semi-solids), other than Class A poisons or irritants materials, which are known to be so toxic to man as to afford a hazard to health during transportation or which, in the absence of adequate data on human toxicity, are presumed to be toxic to man because of the effect they produce on laboratory animals under certain controlled conditions.

c. Irritating Substances - Liquids or solid substances which upon contact with fire or when exposed to air give off dangerous or intensely irritating fumes. This category does not include any Class A poisonous articles.

UNSERVICEABLE AMMUNITION - Ammunition reclassified to unserviceable because of a change in expected service or shelf life or due to deterioration or damage. Unserviceable ammunition is identified by:

a. NAVSEASYSCOM through issue of Notices of Ammunition Reclassification (NAR) and NAVSEA TWO 24-AA-ORD-010 (formerly OD 17190), "AMMUNITION UNSERVICEABLE, SUSPENDED AND LIMITED USE".

b. Inspection which may reveal defective ammunition such as:

(1) Improper seating of fuze in rocket warheads.

(2) Warheads which are cracked, dented, bent and with recesses which are corroded,

(3) Ruptured missile seeker heads.

(4) Dented or deformed pyrotechnics.

(5) Leaking chemical ammunition.

(6) Exudate or other leakage from ammunition items.

WAIVERS - A written authorization from the Chief of Naval Operations which specifically permits deviation from a mandatory regulation or instruction for a limited time pending correction of the deficiency.

APPENDIX C

LETTER OF INSTRUCTION FOR UNITS INHABITING CAMP WILSON'S
FIELD AMMUNITION SUPPLY POINT

UNITED STATES MARINE CORPS
COMBAT SERVICE SUPPORT DETACHMENT (NUMBER)
(Name & Address)

8000
(Code)
(Date)

From: Commanding Officer, Combat Service Support Detachment (Number)
To: ESO, Center Safety

Subj: LETTER OF INSPECTION (LOI) FOR CAMP WILSON'S, FIELD AMMUNITION SUPPLY POINT (FASP)

Ref: (a) NAVSEA OP 5 Vol. 3
(b) NAVSEA OP 5 Vol. 1
(c) MCO 8020.1F
(d) NAVSEA OP 2239
(e) NAVSEA OP 3681

Encl: (1) Berm Construction
(2) FASP Set-Up
(3) FASP Quantity Distance Map
(4) Supply Requirements

1. BACKGROUND

a. Field Ammunition Supply Points (FASPs) should be located so that they are within reasonable support distance for the units to be supported. Sites selected should provide a defilade so that direct observation is not possible.

b. Three systems are utilized for the storage of explosives and ammunition they are:

(1) Open Storage (Road Side)/Stacks;

(2) Modular (Berm) Storage;

(3) Combination of the above.

The choice of systes used should be based upon the physical characteristics of the site selected for the FASP. For Desert Fire Exercise (DESFIREX) (Number) and/or Combined Arms Exercise (CAX) (Number) an (Type) storage system will be utilized.

(4) Dispersion: The principal objective in the dispersion of ammunition is to minimize the loss of personnel and equipment due to fire or accidental explosion of a storage cell. The Quantity Distance tables as specified in Table 3-1 of reference (a) shall be used for the setup of ammunition supply points. These distances protect personnel and property in the area adjacent to the FASP and reduce to a minimum the possibility of propagation involving large masses of ammunition and explosives. Further, these precautions limit the quantity of military supplies that may be lost in any explosion.

Subj: LETTER OF INSPECTION (LOI) FOR CAMP WILSON'S, FIELD AMMUNITION SUPPLY POINT (FASP)

(5) Quantity Distance Tables: The Quantity Distance (QD) tables set forth in chapter seven of reference (b) shall be strictly followed.

2. PURPOSE. The purpose of this LOI is to provide specific guidance regarding the construction and operation of the FASP at Camp Wilson in Twentynine Palms, CA, during CAX (Number). References (a) through (e) were used as source documents for the completion of this LOI.

3. MISSION. Provide the ammunition required for DESFIREX , Pre- CAX or CAX training for the MAGTF for CAX (Number). To store the ammunition required for CAX (Number).

4. EXECUTION.

a. Concept of Operations. Upon Arrival in Twentynine Palms, CA, the ammunition section will establish a FASP approximately four tenths of a mile from the main CSSD compound. This FASP will be capable of supporting all class V(W) ammunition requirements of the MAGTF during CAX (Number).

(1) Tasks

(a) Engineers

(b) Supply

(c) Communications

(d) Motor Transport

(e) Security

(2) Tasking that cannot be filled will be identified prior to movement to Camp Wilson.

b. Ammunition Draw From Center Magazine Area (CMA). All CAX (Number) ammunition will be drawn and stored in the FASP at Camp Wilson. The ammunition drawn will be completed within (Estimated Number) days of the initial draw.

(1) Tasks

(a) Motor Transport. Provide the vehicles necessary to transport CAX (Number) ammunition from the CMA to the FASP.

1 Each vehicle operator is required to have the following safety equipment:

a NAVSEA OP 2239 (Explosive Drivers Handbook)

b Medical Examiners Certificate

c Explosives Certified License

d Fire Resistant Tarp (Large enough for entire load)

e 10 lbs.ANSUL Fire Extiguisher, two 5 lb PK, or 15 lb CO2 (Must have a rating of 10B:C or greater)

f Tie down straps, (4) per vehicle

Subj: LETTER OF INSPECTION (LOI) FOR CAMP WILSON'S, FIELD AMMUNITION SUPPLY POINT (FASP)

g Triangular reflectors (set of three)

h Explosive placards (must be IAW NAVSEA OP 3681 Table 2-1)

i DD Form 626

j Tape (strong enough to attach plarcards to vehicle)

k Tire chock blocks (2 each)

(2) Vehicles utilized for the transportation of ammunition must be mechanically sound and possess the required equipment or they will be rejected from drawing ammunition for safety reasons.

(b) Engineer Section. Provide (Amount) (Type) forklift for CMA draw and (Amount) Types(s)) forklift(s) during the CAX for the unloading/loading of ammunition.

(c) Ammunition Storage. The engineer section will use Magazine, Intraline and Inhabited Building distances listed in enclosure (3) for the construction of the FASP. References (a) and (b) were used to obtain the Magazine, Intraline and Inhabited Building distances.

(d) Mobil CSSD Support.

1 Tasks

a Motor Transport.

b FASP. (Add in your requirements if any).

2 Any tasking that cannot be filled will be identified prior to movement to Camp Wilson.

(e) Requisitions. Units must request ammunition within a 48 hour advance time period for both a pre-stage and a pick-up date. Ammunition will be issued by records according to unit pack.

(f) Turn-ins to FASP. The serviceability of all ammunition turned in to the FASP during CAX (Number) must be determined by either (Name of OIC or SNCIOC of FASP). The unit tech must turn in ammunition in an orderly fashion. Ammunition must be separated by lot number and in proper packaging containers.

***** NOTE *****

Units will ensure that ammunition is not removed from its original container until immediately befor firing. If containers are opened, the ammunition must be inspected by a Officer/SNCO stating that all componenets are in a container and is safe to transport.

(g) Ammunition Turn-In To CMA. Ammunition turned in at the end of CAX (Number) will be accomplished for all excess ammunition not used/fired curing CAX (Number) to include the mobile.

5. ADMINISTRATION AND LOGISTICS. All administrative and logistics requirements will be handled through the CSSOC.

6. COMMAND AND SIGNAL.

a. Signal.

(1) The primary means of communication between the FASP and Camp Wilson will be tactical telephone.

(2) The alternate means of communication will be radio.

(3) Fire Warning will be sounded by (Type of Equipment)

b. Command. (Name of individual) is the (OIC/SNCOIC) of the FASP. All questions concerning this LOI should be directed to (Name(s) and Rank(s)) at CSSD-(Number), ext. (Number).

FIELD AMMUNITION SUPPLY POINT (FASP) SET-UP

STORAGE PAD	TYPE OF ITEMS STORED
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
Sling-Out Area	

Figure C-1.--PROPOSED FASP

APPENDIX D

LETTER OF INSTRUCTION FOR TRANSIENT UNITS INHABITING MCAGCC'S EXPEDITIONARY AIR-FIELD (EAF) AMMUNITION ISSUE POINT (AIP)

UNITED STATES MARINE CORPS
AIR COMBAT ELEMENT (Number)
(Name & Address)

8000
ACEORD
(Date)

From: Commanding Officer, Air Combat Element (Number)
To: Distribution List

Subj: LETTER OF INSTRUCTION (LOI) FOR EXPEDITIONARY AIR-FIELD (EAF) AMMUNITION ISSUE POINT (AIP)

Ref: (a) NAVSEA OP 5 Volume 1
(b) NAVSEA OP 5 Volume 3
(c) NAVSEA OP 2239

Encl: (1) AIP Diagram
(2) Supply Requirements
(3) List of Required Publications
(4) Ammunition Preposition Request
(5) Personnel Roster by Name, Rank, SSN & Billet

1. Purpose. The purpose of this LOI is to provide specific guidance in the procurement, handling, assembly/ disassembly and temporary storage of Class V(A) material at the AIP for CAX (Number).

2. Concept of Operations. Upon arrival at MCAGCC 29 Palms, CA. The ACE Ordnance section will establish an AIP at a site to be pre-determined by Aviation Ground Support Element (AGSE). The operation of this AIP will be supportive of an Advance Base training scenario. Reference (a) will govern explosive safety distances. Reference (b) will govern operational procedures.

3. Mission. Provide the Class V(A) ammunition requirements for aviation units participating in CAX (Number).

4. Background. The AIP is an essential component of an EAF. Location of this area of operation should be within a reasonable distance from the air-field in order to facilitate security, equipment and communication requirements from the supporting Marine Wing Support Squadron (MWSS) and must be located close enough to provide timely response to ammunition requests driven by the Air Tasking Order (ATO).

a. Quantity-Dstance (QD). Prevention of propagation as a result of catastrophic detonation is as important during combat, if not more, than in a peace time environment due to the hazards associated with combat. For this reason strict adherence to QD tables found in Chapter 7 of reference (a) shall be enforced.

b. Temporary Storage Sites. Two types of Open-Storage are available within the AIP. Both types can be expected in a combat environment. Storage within the earthen eight-cell module can be classified as barricaded open-storage for thick skinned and containerized Hazard Class 1.1 (i.e, MK 80 series bombs, 20mm to 30 mm containerized ammunition and cluster bombs in a non-flammable container). Storage of all other ammunition regardless of hazard class must be within the criterion of unbarricaded open-storage regardless of the use of the eight-cell module.

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c. Assembly Areas. Assembly areas such as rocket buildup and bomb assembly shall have the greater of distance of Intraline to a storage site of Inter-Magazine distance to assembly area for purpose of siting. Use of grounding rods for static discharge shall be used in rocket buildup evolutions.

5. Execution:

a. Tasks - Upon arrival.

(1) Supply - Provide equipment and material listed in enclosure (2).

(2) Communications - Provide land line communication between the Guard Tower and Guard Shack. Provide radio or land line communication between the encampment area and Command Element. Provide telephone link between the encampment area and AGSE for purpose of emergency response.

(3) Motor Transport - Provide a minimum of three (3) LVS and four (4) 5-ton vehicles for the receipt and retrograde phase of transport between the AIP and Central Magazine Area (CMA). Provide three (3) 5-ton and two (2) HMMWV vehicles for the duration of CAX (Number). Each LVS and 5-ton vehicle shall include an Explosive Qualified Driver with the following:

(a) OP 2239 Explosive Driver Handbook;

(b) Medical Examiner's Certificate;

(c) Explosive Certified License;

(d) 10 lb. ANSUL Fire Extinguisher;

(e) Tie down straps, (4) per vehicle;

(f) Triangular reflectors (set of three);

(g) Explosive placards (A or B);

(h) DD Form 626 (Top portion completed by MT Mechanic);

(i) Tape to attach placards to vehicle;

(j) Chock blocks.

(4) S-4 - Provide the guard force to man two posts organic to the AIP. Night Vision devices should be used during hours of darkness.

(5) Engineers - Provide (1) EBFL and (2) RT 4000 forklifts with explosive qualified operators for duration of CAX (Number).

b. Tasks - Ordnance personnel operations.

(1) Ammunition Storage. AIP personnel will determine the layout of ammunition and upon completion submit a diagram to AGSE for distribution to interested parties.

(2) Ammunition Assembly Areas. AIP personnel will assemble and deliver ammunition based on requests received by user activities. Pre-build of ammunition shall not exceed one day of normal use.

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(3) Delivery/Return. Ammunition will be delivered to using squadrons upon receipt of Munitions Request Form ( ). Non ATO requests shall be submitted by using squadrons no later than 1800 the previous day. Upon notification by squadron personnel that items delivered are no longer needed.

(4) Ammunition Containers and Packing Material. Containers and packing materials will be saved until verification that contents have been expended.

(5) Weather Conditions. Upon notification of destructive weather conditions, ACE Ordnance personnel will take appropriate action. During Thunder Condition I, the AIP shall be evacuated to the encampment area with exception of guard personnel.

c. Tasks - Retrograde.

(1) S-4 - Secure guard force upon notification that all explosive material has been removed from the AIP.

(2) Motor Transport - Provide a minimum of (3) LVS and four 5-ton vehicles for transport from the AIP to the CMA.

(3) ACE Ordnance - Determine Condition Codes of turn-in munitions and return items in proper packaging. Factory sealed containers require no special consideration as to inventory, however, any container in which a factory seal has been broken must be verified in order to establish the correct count. Lot numbers shall not be mixed within the same container unless items were identified as a Functional Lot previously.

6. Administration and Logistics. All administrative and logistics requirements will be handled through the appropriate ACE's section.

7. Command and Signal.

a. Command. (Name of Individual) is the (OIC/SNCOIC) of the ACE Ordnance Element. All questions concerning this LOI should be directed to (Name, Rank) at DSN ( ).

b. Signal.

(1) The primary means of communication will be tactical telephone between ACE Ordnance Compound to ACE Element and Land Line between Guard Post and Guard Tower.

(2) The alternate means of communication will be radio.

NOTE

Radio Communication shall not be used when unsafe HERO conditions would result from its use.